

CAARI 2014 SCHEDULE OF EVENTS - SUNDAY, MAY 25, 2014

12:00 - 5:00 pm	Onsite Registration & Information Desk Open	2nd Floor
6:00 - 8:00 pm	Welcome Reception	Lone Star Ballroom

CAARI 2014 SCHEDULE OF EVENTS - MONDAY, MAY 26, 2014

7:00 AM - 4:00 PM	Onsite Registration Open	2nd Floor
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7:00 AM	Continental Breakfast	Lone Star Ballroom
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8:00 AM - 6:00 PM	Vendor Exhibit Open	Lone Star Ballroom
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8:00 AM	Welcome and Conference Opening	Lone Star Ballroom
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Plenary Sessions	Lone Star Ballroom
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	PS01	ABS	
8:30 AM	Robert Cywinski	# 350	Thorium Based Energy Production Using Accelerators
9:15 AM	Claire Pacheco	# 314	Last Improvements on AGLAE Facility and their Application to the Analysis of Cultural Heritage Artefacts

10:00 - 10:30 AM	Break	Lone Star Ballroom
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General Sessions

AFT01			Title: Accelerator Technology for Energy	Presido A
		ABS	Chair: Bob Cywinski	
10:30 AM	Didier de Bruyn	# 62	The MYRRHA ADS project in Belgium enters the Front End Engineering Phase	
11:00 AM	Francois Meot	# 304	Fixed field ring methods for high power beams	
11:30 AM	Amar Sinha	# 360	Experimental Subcritical Facility Driven by D-D/D-T Neutron Generator at BARC, India	
11:45 AM	Nathaniel Pogue	# 194	A Strong Focusing Cyclotron capable of producing 10 mA of proton beam up to 800 MeV and its applications	
12:00 PM	Valeriia Starovoitova	# 23	A Fast Spectrum Neutron Source for Material Irradiation Using a Superconducting Electron Linac	
12:15 PM	Carol Johnstone	# 460	Compact CW Racetrack FFAG for High-intensity Applications	

IBA06			Title: Chemical and Molecular Speciation and Imaging	Presido B
		ABS	Chair: Aliz Simon	
10:30 AM	Roger Webb	# 155	Elemental, Chemical & Molecular Speciation Using MeV Ion Beams: What, How and Why?	
11:00 AM	Tilo Reinert	# 436	Imaging and Analysis of Fixed Charge Density in the Brain using PIXE and Fe(III)-Ions as a Probe	
11:20 AM	Alex Henderson	# 256	SIMS Analysis of Biological Material in 1-, 2- and 3 Dimensions	
11:40 AM	Jiro Matsuo	# 300	MeV-SIMS: A new chemical imaging technique for organic materials	
12:00 PM	Julien Demarche	# 348	Pharmaceutical and biomedical applications possibilities of ambient pressure MeV-SIMS	
12:15 PM	Iva Bogdanovic Radovic	# 106	Molecular imaging of organic samples using MeV SIMS setup at the heavy ion microprobe in Zagreb	

RE05			Title: Radiation Effects in Complex Structures and Materials	Presido C
		ABS	Chair: Srinivasan G. Srivilliputhur	
10:30 AM	Kurt Sickafus	# 443	Atomic Structure and Radiation Effects in Complex Oxides	
11:00 AM	Ming Tang	# 122	Ion radiation damage in Sr ₂ Fe _{1.5} Mo _{0.5} O _{6-δ} Perovskite	
11:15 AM	Tieshan Wang	# 406	Micro-bumps on the surface of borosilicate glasses induced by ion irradiation	
11:30 AM	Andy Smith	# 451	Ion beams studies of the radiation chemistry and radiation damage of materials important in nuclear power	
12:00 PM	Naidu Seetala	# 428	Defect Analysis of Heavy Ion-Irradiation of Polyethylene and Composites with Martian Regolith	

HSD01			Title: Container Security - Part I	Travis A/B
		ABS	Chair: Tsahi Gozani	
10:30 AM	Joel Rynes	# 108	Domestic Nuclear Detection Office's Approach to Detect Concealed Threats	
11:00 AM	Tsahi Gozani	# 486	Photofission based interrogation techniques for nuclear materials	
11:30 AM	Cody Wilson	# 82	Non-intrusive Inspection Using CW Photon Beams	
12:00 PM	Cassie Hill	# 166	Mixed source interrogation of steel shielded special nuclear material using an intense pulsed source	
12:15 PM	Michael J King	# 30	A light transportable neutron based inspection system for nuclear material and other contraband	

NP01			Title: New Facilities and Initiatives I	Travis C/D
		ABS	Chair: Alfredo Galindo-Uribarri	
10:30 AM	Aliz Simon	# 308	The IAEA new Accelerator Knowledge Portal	
10:50 AM	Peter McIntyre	# 239	Proposal for New World Laboratory: XFEL for protein spectroscopy, Higgs Factory for a million Higgs decays, 100 TeV Hadron Collider for supersymmetry	
11:15 AM	Gabor Gyula Kiss	# 346	Experimental nuclear astrophysics research using stable beams at small scale accelerators	
11:40 AM	Philip Voss	# 402	The TIGRESS Integrated Plunger Device and In-Beam Gamma-Ray Spectroscopy at TRIUMF	
12:05 PM	Nicolae Marginean	# 141	ROSPHERE – a dedicated in-beam fast timing HPGe-LaBr3(Ce) array	

MA03			Title: Accelerator Production of Medically Relevant Isotopes	Bonham B
		ABS	Chairs: Carole Johnstone & Valeriia Starovoitova	
10:30 AM	Yasuki Nagai	# 305	Medical isotope production using high intensity accelerator neutrons	
11:00 AM	Peter Zavodszky	# 153	Direct Production of ^{99m} Tc via ¹⁰⁰ Mo(p,2n) on Small Medical Cyclotrons	
11:20 AM	Sergey Chemerisov	# 282	Progress Related to Domestic Production of Mo-99: Accelerator Induced Fission in LEU Solution	
11:40 AM	Keith Woloshun	# 43	Design and Thermal-Hydraulic Performance of a Helium Cooled Target for the Production of Medical Isotope ^{99m} Tc	
12:00 PM	Bindu KC	# 321	Converter and Target Optimization for the Photonuclear Production of Radioisotopes Using Electron Linear Accelerators	
12:20 PM	Robert Cywinski	# 337	The Potential of a Compact Accelerator for Low Energy Production of Copper Isotopes	

IBM01			Title: Ion Implantation – New Directions	Bonham C
		ABS	Chair: Bibhu Rout	
10:30 AM	Haizhou Xue	# 255	In-situ characterization by RBS/C of damage evolution and thermal recovery on irradiated 3C-SiC	
10:55 AM	Amila Dissanayake	# 388	Synthesis of silver nanoparticles in MgO and YSZ using low energy ion implantation	
11:20 AM	Kalyan Sasmal	# 425	Possible interface superconductivity with coherent quantum CDW transport and soliton condensation phase transition in heterogeneously doped ion implanted NbSe ₃ single crystals	
11:35 AM	Jacopo Forneris	# 246	Electroluminescence of NV centers in diamond induced by ion-beam micro-fabricated graphitic electrodes	
11:50 AM	Mihai Straticiuc	# 219	High Energy (MeV) Ion Beam Implantation in INT-WS ₂	
12:05 PM	Jitendra Kumar Tripathi	# 454	Low Energy Ar ⁺ Ion Irradiation Induced Surface Modification in Cadmium Zinc Telluride (CdZnTe)	
12:20 PM	Wickramaarachchige Lakshantha	# 392	XPS Characterization of β -FeSi ₂ formed in Si (100) by high fluence implantation of 50 keV Fe ion and post-thermal vacuum annealing	

NST03			Title: Graphene, Carbon Nanotubes and Composites	Bonham D
		ABS	Chair: Lin Shao	
10:30 AM	Joseph Wallace	# 383	Radiation effects on nano mechanics of low dimensional carbon systems	
11:00 AM	Di Chen	# 190	An ion-beam-based technique to characterize thermal property changes of irradiated carbon nanotubes	
11:30 AM	Jing Wang	# 197	Irradiation induced thermal property changes of carbon nanotubes	
12:00 PM	Jiri Vacik	# 264	Laser induced periodic surface structures in nickel-fullerene hybrid composites	

12:30 - 2:00 PM LUNCH BREAK

ATF02			Title: Accelerators for Isotope Production	Presido A
		ABS	Chair: Sergey Chemerisov	
2:00 PM	Evan Sengbusch	# 143	Accelerator-Driven Subcritical Assembly for the Production of Molybdenum-99	
2:30 PM	Faisal Alrumayan	# 476	Development of a Visualization System for Charged Particles Shapes Superimposed on the Waveform of the Cyclotron Frequency	
2:50 PM	Valeriia Starovoitova	# 24	Production of Medical and Industrial Isotopes Using a Superconducting Electron Linac	
3:10 PM	Sergey Chemerisov	# 280	Accelerator Based Domestic Production of Mo-99: Photonuclear Approach	

HSD03			Title: Long Standoff Detection	Travis A/B
		ABS	Chair: Peter Zielinski	
2:00 PM	Jim Silk	# 329	An Overview of Active Interrogation	
2:20 PM	Bob Commisso	# 146	Application of Intense, Single-Pulse Bremsstrahlung to the Problem of Finding Fissile Material	
2:40 PM	Sudeep Banerjee	# 243	Narrowband and tunable all-laser-driven inverse-Compton x-ray source	
3:00 PM	Zachary Conway	# 364	Advanced Low-Beta Cavity Development for Proton and Ion Accelerators	
3:20 PM	Carol Johnstone	# 404	A Novel Compact Accelerator for Proton Interrogation	

NP10			Title: New Facilities and Initiatives II	Travis C/D
		ABS	Chair: Alfredo Galindo-Uribarri	
2:00 PM	Peter Schury	# 353	Multi-Reflection Time-of-Flight Mass Spectrograph for Precision Mass Measurements of Short-Lived Nuclei and More	
2:25 PM	Nathan Brewer	# 401	Search for ^{283,284,285} Fl decay chains	
2:40 PM	Vinzenz Bildstein	# 339	New opportunities in decay spectroscopy with the GRIFFIN and DESCANT arrays	
3:05 PM	Mohammad Alshudif	# 187	Development of Fast, Segmented Trigger Detector for Decay Studies	
3:20 PM	Karolina Kolos	# 385	Alpha- and proton-decay studies in the vicinity of 100Sn	

MA01			Title: Particle Beam Radiobiology	Bonham B
		ABS	Chair: John Eley	
2:00 PM	Alejandro Carabe	# 467	Current advances in the biological optimization of proton treatment plans	
2:30 PM	Lawrence Bronk	# 461	High-throughput Mapping of Proton Biologic Effect	
2:45 PM	Christopher Peeler	# 492	Radiobiological Modeling of High-Throughput Proton Irradiation Cell Survival Experiments	
3:00 PM	John Eley	# 456	Predicted Risks of Second Cancers after Carbon-Ion Therapy versus Proton Therapy	
3:15 PM	Tatiana Wolfe	# 484	Tumor-targeting gold nanoparticles as engineered radiosensitizers for proton therapy: In Vivo Study at the SOBP and Beam Entrance	

IBM04			Title: New Challenges in SIMS	Bonham C
		ABS	Chairs: Zihua Zhu & Iva Bogdanovic Radovic	
2:00 PM	Xiao-Ying Yu	# 98	Probing Environmental and Energy Liquid Surfaces and Interfaces Using Time-of-Flight Secondary Ion Mass Spectrometry	
2:25 PM	Makiko Fujii	# 88	Possibilities and Limitations of MeV-SIMS for Biological Applications	
2:50 PM	Roger Webb	# 158	AP-MeV-SIMS at Surrey - a new ambient pressure SIMS system for molecular concentration mapping	
3:15 PM	Julien Demarche	# 165	Ambient Pressure MeV-SIMS analysis of contaminated PTFE aerosol filters	
3:20 PM	John-William Warmenhoven	# 162	Modeling the Transport of Secondary Ion Fragments Into a Mass Spectrometer Through Ambient Pressure Using COMSOL Multiphysics Simulation Software	

NST05			Title: Bio-Materials and Bio-Medical Applications - Part I	Bonham D
		ABS	Chair: Daryush Ila	
2:00 PM	Cecilia Salvadori	# 91	Cell Adhesion and Growth on Modified Surfaces by Plasma and Ion Implantation	
2:35 PM	Esperidiana Moura	# 229	Applications of electron-beam irradiation for the preparation of novel biomaterials – A review	
3:05 PM	Mark Mangus	# 288	Ion Beam Analysis of Materials Used in Hermetic Single-Device Human Implants integrating Bio-sensors with Medical Electronics	

3:30 - 4:00 PM	Break	Lone Star Ballroom
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IBA08			Title: IBA for Cultural Heritage Applications & Environment	Presido B
		ABS	Chair: Lucile Beck	
4:00 PM	Lucio Calcagnile	# 237	Accelerator based techniques at CEDAD for cultural heritage studies	
4:30 PM	Giulia Calzolari	# 234	High-throughput PIXE analysis of aerosol samples	
5:00 PM	Mohamad Roumie	# 103	Characterization of pottery production of Tyre historical site using PIXE technique and cluster analysis	

RE02			Title: Radiation Effects in Metals Using Ion Accelerators	Presido C
		ABS	Chair: Peter Hosemann & Amanda Lupinacci	
4:00 PM	Khalid Hattar	# 131	Small-Scale Thermal and Mechanical Characterization of Ion Irradiated Structural Metals	
4:25 PM	Frank Garner	# 325	What have we learned about swelling resistance and dispersoid stability in ODS variants of ferritic-martensitic alloys using self-ion bombardment?	
4:45 PM	Arun Persaud	# 269	Accessing Defect Dynamics using Intense, Nanosecond Pulsed Ion Beams	
5:00 PM	Elizabeth Sooby	# 252	The Effects of Simultaneous Molten Salt Corrosion and Radiation Damage Simulated via Ion Beam Irradiation	
5:15 PM	Marie-France Barthe	# 233	Vacancy defects induced in Tungsten by 20 MeV W ions irradiation: Effect of fluence and temperature irradiation	

HSD02			Title: Container Security - Part II	Travis A/B
		ABS	Chair: Willy Langeveld	
4:00 PM	Sami Tantawi	# 447	High Duty Factor Compact Linear Accelerator Systems	
4:25 PM	Anatoli Arodzero	# 147	ARCIS: Adaptive Rail Cargo Inspection System	
4:45 PM	Alex Saverskiy	# 148	Intra-Pulse Multi-Energy Method for Material Discrimination in X-ray Cargo and Container Inspection	
5:05 PM	Vladimir G Solovyev	# 85	Air Cargo Mobile Scanner Based on Associated Particle Imaging	
5:25 PM	Willy Langeveld	# 212	New Accelerator Design for Homeland Security X-Ray Applications	

NP02			Title: Nuclear Fission	Travis C/D
		ABS	Chairs: Stephen Wender & Fredrik Tovesson	
4:00 PM	Rhiannon Meharchand	# 170	The LANSCE Nuclear Fission Research Program	
4:25 PM	Adam Hecht	# 324	The University of New Mexico fission fragment spectrometer, with preliminary results from LANSCE	
4:50 PM	Krista Meierbachtol	# 198	Recent studies of fission fragment properties at LANSCE	
5:10 PM	Dana Duke	# 377	Average Total Kinetic Energy Measurements of Neutron Induced Fission for ^{235}U , ^{238}U , and ^{239}Pu	

MA02			Title: Evolving Accelerator Concepts for Medical Applications	Bonham B
		ABS	Chairs: George Coutrakon & JJ Su	
4:00 PM	George Coutrakon	# 334	An Overview of Proton Accelerators for Cancer Therapy	
4:30 PM	Carol Johnstone	# 405	Overview of Carbon-ion Accelerators for a US-based National Center for Particle Beam Radiation Therapy Research	
4:50 PM	Francois Meot	# 301	Multiple-room, continuous beam delivery hadrontherapy installation	
5:10 PM	Terry Grimm	# 25	A High Intensity 10 MeV X-ray Generator to Eliminate High Activity Sources Used for Sterilization	

NST06			Title: Bio-Materials and Bio-Medical Applications - Part II	Bonham D
		ABS	Chair: Daryush Ila	
4:00 PM	Jean-Francois Alary	# 381	Improving AMS Detection of the Biomedical Radiotracer ⁴¹ Ca with Segmented Radio-Frequency Quadrupoles	
4:30 PM	Makiko Fujii	# 89	Lipid Compounds Analysis with Argon Gas Cluster Ion Beam Irradiation	
4:55 PM	Stephen Mulware	# 182	Quantitative analysis of iron (Fe) uptake by corn roots using micro-PIXE	

5:30 - 7:30 PM	Poster Session 1		All Posters - list available on pages 26-29	Lone Star Ballroom
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CAARI 2014 SCHEDULE OF EVENTS - TUESDAY, MAY 27, 2014

7:00 AM - 4:00 PM	Onsite Registration Open	2nd Floor
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7:00 AM	Continental Breakfast	Lone Star Ballroom
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8:00 AM - 6:00 PM	Vendor Exhibit Open	Lone Star Ballroom
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Plenary Sessions	Lone Star Ballroom
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	PS02	ABS	
8:00 AM	Eugen Hug	# 482	Charged-Particle Therapy Takes Center Stage
8:45 AM	Thomas Stoehlker	# 485	Facility for Antiproton and Ion Physics

9:30 - 10:00 AM	Break	Lone Star Ballroom
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General Sessions

ATF05			Title: Emerging Accelerator Technologies	Presido A
		ABS	Chair: Cameron Geddes	
10:00 AM	Jeroen Van Tilborg	# 283	Laser Plasma Accelerators as Driver of Future Light Sources	
10:30 AM	Alec Thomas	# 220	Ultrafast electron bunches from a laser-wakefield accelerator at kHz repetition rate	
11:00 AM	Hideshi Muto	# 3	Status of plasma spectroscopy method for CNS Hyper-ECR ion source at RIKEN	
11:20 AM	Ryan Edward Phillips	# 53	Magnetic Control of a Neutralized Ion Beam	
11:30 AM	Carlos Ordonez	# 80	Space-Charge Compressed Ion Beam Equilibrium	
11:40 AM	Tim Koeth	# 438	Rapid High Dynamic Range Dose Profiling at the University of Maryland Radiation Facility's E-Beam	
11:50 AM	Ivan Konoplev	# 129	Broadband source of coherent THz radiation based on compact LINAC	

IBA03			Title: IBA of Technologically Important Oxides and Nitrides	Presido B
		ABS	Chair: Shuttha Shutthanandan	
10:00 AM	Hsu-Cheng Huang	# 83	Comparison of Radiation Damage by Light- and Heavy-Ion Bombardment in Single-Crystal LiNbO ₃	
10:30 AM	Miguel Crespillo	# 272	In-situ study of damage evolution in SrTiO ₃ and MgO using ion beam-induced luminescence	
11:00 AM	Shude Yao	# 149	The New Applications of Rutherford Backscattering Spectrometry/Channeling	
11:30 AM	Karur Padmanabhan	# 295	Effect of transition metal ion implantation on photocatalysis and hydrophilicity of MOD deposited TiO ₂ -V ₂ O ₅ and mixed oxide films	
11:45 AM	Amila Dissanayake	# 430	The Role of Oxygen Vacancies in Conductivity of SrCrO ₃ - Films	

RE04			Title: Radiation Effects in Electronics - Part II	Presido C
		ABS	Chair: Elizabeth Auden	
10:00 AM	Heather Quinn	# 302	Interactions with Neutron Radiation in High-Performance Computing	
10:30 AM	Mike McCurdy	# 242	The Vanderbilt Pelletron - Radiation Effects on Electronics and Materials Characterization	
11:00 AM	William Geoff Bennett	# 133	Efficient Reliability Testing of Emerging Memory Technologies Using Multiple Radiation Sources	
11:30 AM	Rachel Quinn	# 225	Use of Alpha Particle and Ion Accelerators for Characterization of Soft-Error Reliability in Advanced ICs	
11:55 AM	Barney Doyle	# 446	Degredation of GaAs Photovoltaics Exposed to Reactor Neutrons and Accelerator Ions	

NP03			Title: Reactions on Unstable Nuclei	Travis C/D
		ABS	Chairs: Stephen Wender & Aaron Couture	
10:00 AM	Calem Hoffman	# 11	Recent Measurements at HELIOS	
10:25 AM	Ingo Wiedenhover	# 134	Recent advances with ANASEN at the RESOLUT radioactive beam facility	
10:50 AM	Artemis Spyrou	# 13	Reaction measurements with SuN	
11:10 AM	Travis Baugher	# 258	Intermediate-energy Coulomb excitation of neutron-rich chromium isotopes	
11:30 AM	Giordano Cerizza	# 247	Neutron Knockout on Beams of $^{108,106}\text{Sn}$ and ^{106}Cd	

MA04			Title: Developments in Target Delineation, Beam Scanning and Dose Delivery	Bonham B
		ABS	Chair: Reinhard Schulte	
10:00 AM	Reinhard Schulte	# 427	Status Update and New Developments in Planning, Verification, and Active Delivery of Particle Beam Therapy	
10:20 AM	Bruce Faddegon	# 466	New developments in Monte Carlo based treatment planning for proton therapy	
10:40 AM	John Eley	# 469	4D-optimized beam tracking for treatment of moving targets with scanned ion-beam therapy	
11:00 AM	Jay Steele	# 475	Proton therapy using pencil beam spot scanning technology	
11:20 AM	Sergey Uzunyan	# 95	Progress in the development of the proton Computed Tomography (pCT) Phase-II scanner at NIU	
11:40 AM	Nicholaos Tsoupas	# 109	An Uncoupled and Achromatic Gantry for Medical Applications	

IBM02			Title: Swift Heavy ion modification of Materials – Nanostructuring	Bonham C
		ABS	Chairs: Andrzej Turos & Nagesh Sunkaranam	
10:00 AM	Leonard C Feldman	# 72	Nano-scale Materials	
10:25 AM	Andrzej Turos	# 42	Radiation defects in nanoscale: the case of compound materials	
10:50 AM	N. Srinivasa Rao	# 14	Ion beam induced effects on nanocrystals, alloys and high-k dielectric films	
11:15 AM	V S Vendamani	# 9	An On-line ERDA Study on SHI Induced Desorption of Hydrogen from Porous Silicon Prepared by Anodic Etching of H-implanted Silicon	
11:30 AM	Manikantha Babu Nethala	# 15	Swift Heavy Ion induced intermixing effects in HfO ₂ based MOS devices	
11:45 AM	Noriaki Matsunami	# 232	Ion irradiation effects on WNxOy films	
11:50 AM	Nand Lal Singh	# 64	Effect of Swift Heavy Ion Irradiation on Dielectric, Thermal and Structural Properties of Metal/Polymer Composites	

NST01			Title: Nanoscale Fabrication and Patterning - Part I	Bonham D
		ABS	Chair: John Baglin	
10:00 AM	Daryush Ila	# 26	Ion Beam Assisted Enhanced Thermoelectric Properties (with Figure of Merit above 2.0)	
10:35 AM	Dharshana Wijesundera	# 270	Ion beam engineered nano metallic substrates for surface enhanced Raman spectroscopy	
11:05 AM	Sunil Kumar Sahi	# 221	Hybrid inorganic-organic composite materials for radiation detection	
11:35 AM	Daryush Ila	# 7	Nano-crystal Formation and Growth from High Fluence Ion Implantation of Au, Ag, or Cu in Silica or MgO	
11:40 AM	Satilmis Budak	# 285	Thermoelectric and Optical Properties of SiO ₂ /SiO ₂ +Au Multilayer ThinFilms Affected by Thermal Annealing	
11:45 AM	Sunil Deshpande	# 150	Pair Distribution Function Analysis of nanocrystalline ZnS and CdS	

12:00 - 1:30 PM LUNCH BREAK

ATF03			Title: Applications of of SC Linac and SRF Technology	Presido A
		ABS	Chairs: Terry Grimm & Jerry Hollister	
1:30 PM	Charles H. Boulware	# 70	Superconducting RF Accelerators for Commercial Applications	
2:00 PM	Alex Castilla	# 96	SRF Dipoles for Deflecting and Crabbing Applications	
2:20 PM	Justin Hill	# 331	Advanced Materials Manufacturing with Superconducting Electron Accelerators	
2:40 PM	William Colson	# 230	Compact Free Electron Lasers Driven By Superconducting Linacs	

IBA05			Title: Applications of Nuclear Scattering and Reaction Analysis	Presido B
		ABS	Chair: Yongqiang Wang	
1:30 PM	Lucile Beck	# 330	Implantation and analysis of helium by NRA and HI-ERDA at the JANNUS-Saclay laboratory	
2:00 PM	Timothy Jen	# 275	Identifying the Dominant Interstitial Complex in GaAsN Alloys	
2:20 PM	Karur Padmanabhan	# 271	Microbeam contrast imaging analysis of gas-solid interface and NO adsorption studies on Rh(111) surface	
2:40 PM	Yongqiang Wang	# 407	Nuclear reaction analysis of deuterium in ion irradiated and plasma exposed tungsten	

RE03			Title: Radiation Effects in Electronics - Part I	Presido C
		ABS	Chair: Stephen A. Wender	
1:30 PM	Heather Quinn	# 192	The Effect of Space Weather on Electronics	
1:55 PM	Elizabeth Auden	# 318	A Low Noise Detection Circuit for Probing the Structure of Damage Cascades with IBIC	
2:20 PM	Edward Bielejec	# 124	Radiation Testing Capability for Electronic Devices and Circuits at Sandia's Ion Beam Laboratory	
2:35 PM	Jose Pacheco	# 222	Localization of Conductive Filaments in TaOx Memristor using Focused Ion Beam Irradiation	
2:50 PM	Lun Ma	# 167	X-ray Radiation Effect on ZnS:Mn,Eu Fluorescence for Radiation Detection	

AMP01			Title: Atomic and Molecular Physics with keV Ion Beams	Travis A/B
		ABS	Chair: Kevin Carnes	
1:30 PM	Henrik Pedersen	# 114	XUV photofragmentation of small water cluster ions	
1:55 PM	Daniel Strasser	# 316	Fast ion beam studies of Intense laser interactions with molecular anions	
2:20 PM	Kenneth Miller	# 279	Merged beams studies for astrobiology	
2:45 PM	Mohamed Ghazaly	# 289	Development of a high resolution Analyzing Magnet System for large and heavy molecular ions	
2:50 PM	Tessa J Lamberton	# 47	Line ratios of soft X-ray emissions following charge exchange between C ⁶⁺ and Kr	
2:55 PM	López Patiño Juan	# 178	Process Identification and Relative Cross Sections for Low-keV Proton Collisions in N ₂ and CO ₂ Molecules	

NP04			Title: Reactor Neutrinos	Travis C/D
		ABS	Chair: Anna Hayes	
1:30 PM	Karsten Heeger	# 448	Precision Neutrino Physics with Reactor Antineutrinos	
1:50 PM	Nathaniel Bowden	# 415	PROSPECT: A Short Baseline Reactor Antineutrino Oscillation Experiment	
2:10 PM	Patrick Huber	# 333	Reactor neutrino fluxes	
2:30 PM	John Learned	# 458	The miniTImeCUbe, the World's Smallest Neutrino Detector	
2:50 PM	Karolina Kolos	# 278	Past and future studies of the beta-delayed neutrons with VANDLE	

MA06			Title: Clinical Progress with Proton Therapy	Bonham B
		ABS	Chair: Anita Mahajan	
1:30 PM	David Followill	# 116	The Current Status of Proton Therapy in the Cooperative Group Multi-institutional Clinical Trials Setting	
1:50 PM	Zhongxing Liao	# 465	Prospective Clinical Trials of Proton and Photon Radiation for Non-Small Cell Lung Cancer	
2:10 PM	Anita Mahajan	# 478	Pediatric Proton Therapy - an Update	
2:30 PM	Reinhard Schulte	# 424	The ANDANTE Project: A Multidisciplinary Approach to Estimate the Risk of Neutrons in Pediatric Proton Patients	
2:50 PM	Rich Levy	# 473	Summary of Ongoing Clinical Protocols for Proton and Heavier-Ion Therapy	

NST07			Title: Ripples, Simulation and Experiments - Part I	Bonham D
		ABS	Chair: Mark Bradley	
1:30 PM	Hans Hofsäass	# 81	Ion irradiation of Si surfaces – what determines the formation of ripple patterns?	
2:00 PM	Scott Norris	# 78	Crater Functions from the Binary Collision Approximation: Energy, Material, and Curvature Dependence	
2:30 PM	Francesco Buatier de Mongeot	# 169	Functional Nanostructures by Self-Organised Ion Beam Sputtering	

3:00 - 3:30 PM Break Lone Star Ballroom

TA03			Title: Vacuum seminar – Part I: Physics of Vacuum	Presido A
			Chair: Walt van Hemert, Senior Trainer, Vacuum Products Division, Agilent Technologies	
3:30 PM	Walt van Hemert		Introduction to high vacuum and ultra-high vacuum, gas behavior at low pressure, the elements of system pressure and total gas load, and materials selection for vacuum system.	

IBA09			Title: General Ion Beam Analysis II	Presido B
		ABS	Chair: Claire Pacheco	
3:30 PM	Caroline Raepsaet	# 79	Ion Beam Analysis in Extreme Environment: investigation of radioactive samples at the micrometric scale	
3:55 PM	Art Haberl	# 136	Monitoring of ion purity in high-energy implant via RBS	
4:10 PM	Ion Burducea	# 214	Thickness evaluation of doped BiFeO ₃ thin films using different techniques	
4:25 PM	Khalid Hossain	# 250	Ion Beam Analysis of Shale rock for Hydrocarbon and Micro-structural Measurement	
4:40 PM	Emmanuel Njumbe Epie	# 287	Ionoluminescence: An Important Ion Beam Analytical Method	

AMP03			Title: Fundamental Processes in Atomic Physics	Travis A/B
		ABS	Chair: Tom Kirchner	
3:30 PM	Allison Harris	# 138	Effect of Inactive Electron in Single Ionization of Helium	
3:55 PM	Daniel Fischer	# 378	Collision dynamics studied with a polarized in-ring MOT target	
4:20 PM	Denton Woods	# 223	Variational calculations of positronium-hydrogen scattering for L=0 to 5	
4:35 PM	Paul Bergstrom	# 191	Atomic Processes in Radiation Dosimetry	
4:50 PM	Antonio Carlos Santos	# 28	Production of Multiply Charged Kr Ions by Synchrotron Radiation	
4:55 PM	Surendra Poonia	# 6	Origin of L satellites in X-Ray emission spectra of elements with ²⁶ Fe to ⁹² U	

NP05			Title: High Energy Density Physics	Travis C/D
		ABS	Chair: Anna Hayes	
3:30 PM	Dawn Shaughnessy	# 310	Radiochemical Measurements of Neutron Reaction Products at the National Ignition Facility	
3:50 PM	Johan Frenje	# 195	High Energy Density Plasmas (HEDP) for studies of basic nuclear science, Stellar Nucleosynthesis and Big Bang Nucleosynthesis	
4:10 PM	Daniel Sayre	# 142	Measurement of the T+T Neutron Spectrum Using the National Ignition Facility	
4:30 PM	Anna Hayes	# 452	Charged-Particle Diagnostics for Inertial Confinement Fusion	
4:45 PM	Ashavani Kumar	# 12	Partial charge changing cross-sections of 300 A MeV Fe ²⁶⁺ ion beam in different target media	

MA07			Title: Clinical Progress with Heavier-Ion Therapy	Bonham B
		ABS	Chair: Rich Levy	
3:30 PM	Rich Levy	# 488	Evolving Role of Charged-Particle Irradiation: Potential and Risks of Clinical Treatment with Particles Heavier than Protons	
4:00 PM	Marco Krengli	# 489	Clinical activity with protons and carbon ions at the National Center for Oncological Hadrontherapy (CNAO) in Italy	
4:30 PM	Naruhiko Matsufuji	# 493	Overview Summary of Clinical Heavier-Ion Progress in Japan	

NST08			Title: Ripples, Simulation and Experiments - Part II	Bonham D
		ABS	Chair: Mark Bradley	
3:30 PM	Harley Johnson	# 296	Crater Function Modeling of Ion Bombardment and Ripple Formation	
4:00 PM	Rachel Goldman	# 441	Formation and Evolution of Ripples on Ion-Irradiated Semiconductor Surfaces	
4:30 PM	Mark Bradley	# 173	Exotic New Patterns and Virtually Defect-Free Ripples Produced by Ion Sputtering	

5:00 - 7:00 PM	Poster Session 2		All Posters - list available on pages 26-29
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Lone Star Ballroom

CAARI 2014 SCHEDULE OF EVENTS - WEDNESDAY MAY 28, 2014

7:00 AM - 4:00 PM	Onsite Registration Open	2nd Floor
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7:00 AM	Continental Breakfast	Lone Star Ballroom
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8:00 AM - 6:00 PM	Vendor Exhibit Open	Lone Star Ballroom
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General Sessions

TA04		Title: Vacuum Seminar – Part II: Pumps and Gauges	Presido A
		Chair: Walt van Hemert, Senior Trainer, Vacuum Products Division, Agilent Technologie	
8:00 AM	Walt van Hemert	Pumping technologies from primary vacuum to UHV, pressure measurement gauges, and integrated vacuum system operation.	

IBA02		Title: Low and Medium Energy Ion Scattering	Presido B
		Chair: Lyudmila Goncharova	
8:00 AM	Helmut Winter	# 36	Recent progress in fast atom diffraction at surfaces
8:30 AM	Francois Schiettekatte	# 422	Multiple scattering simulation: effects at low energy
9:00 AM	Hang Dong Lee	# 189	Medium Energy Ion Scattering investigation of the topological insulator Bi ₂ Se ₃ films
9:15 AM	Lyudmila Goncharova	# 199	Medium energy ions scattering and elastic recoils for thin films and monolayers

AMP02		Title: Electron-Ion Collisions with Applications in Nuclear Physics and Astrophysics	Presido C
		Chair: Reinhold Schuch	
8:00 AM	Stefan Schippers	# 58	Electron Coolers and Storage Rings as Spectroscopic Tools for Highly Charged Ions
8:25 AM	Vola Andrianarijaona	# 457	Radiance line ratios Ly-β / Ly-α, Ly-γ / Ly-α, Ly-δ / Ly-α, and Ly-ε / Ly-α for soft X-ray emissions following charge exchange between C6+ and Kr
8:40 AM	Thomas Stoehlker	# 399	SPARC: Experiments at the High-Energy Storage Ring HESR
9:05 AM	Shakilur Rahman	# 320	Photonuclear studies of the isomeric yield ratios in the production of ^{nat} Ag(g,xn) ^{106m,g} Ag with 50-, 60-, and 70-MeV bremsstrahlung
9:20 AM	Pierre-Michel Hillenbrand	# 349	Electron spectroscopy at the high-energy endpoint of electron-nucleus bremsstrahlung

HSD07			Title: Modeling and Simulation for Accelerator-Based HS&D Technologies	Travis A/B
		ABS	Chair: Gregg McKinney	
8:00 AM	Bob Garnett	# 50	Overview of Accelerators with Potential Use in Homeland Security	
8:30 AM	Michael J King	# 31	An Ultra Low-Exposure Neutron Based Inspection System for Nuclear Material	
8:50 AM	Richard Johnson	# 94	Small Cyclotron Applications and Development	
9:10 AM	Joseph Minervini	# 336	Superconducting Magnets for Ultra Light and Magnetically Shielded, Compact Cyclotrons for Medical, Scientific, and Security Applications	

NP11			Title: Accelerator Mass Spectrometry II	Travis C/D
		ABS	Chair: Alfredo Galindo-Uribarri	
8:00 AM	Wolfgang Kretschmer	# 351	Application of accelerator mass spectrometry to archaeology, geography and environmental research	
8:25 AM	Yuan Liu	# 376	Experimental Investigation of Ion Sources for the Detection of Ultra-trace Uranium and Thorium	
8:50 AM	Giuseppe Porzio	# 449	Basic and applied nuclear physics at CIRCE laboratory	
9:10 AM	Efraín Chávez	# 135	New AMS Facility in Mexico: "Laboratorio de Espectrometría de Masas con Aceleradores": High sensitivity measurements of radioactive isotope concentrations in materials	

MA08			Title: Startup of New Particle Beam Facilities and Overview Summary of Med App Section	Bonham B
		ABS	Chairs: Carl Rossi & Rich Levy	
8:00 AM	Carl Rossi	# 491	Navigating the Logistical and Bureaucratic Minefield of Starting Up a New Particle Therapy Facility	
8:25 AM	Chris Chandler	# 490	Myths and Realities of Developing a Particle Therapy Center	
8:50 AM	Rich Levy and other MA session chairs		Grand Finale Overview Summary of Medical Application Section	

9:30 - 9:45 AM **BREAK** Lone Star Ballroom

ATF04			Title: Accelerator Technology for Security and Defense Applications	Presido A
		ABS	Chair: Mike King	
9:45 AM	Joseph Bendahan	# 39	High-Energy Electron-Beam Tomography	
10:10 AM	Cameron Geddes	# 44	Nuclear detection & characterization with laser-plasma accelerator driven quasi-monoenergetic photon sources	
10:35 AM	Evan Sengbusch	# 97	A High Flux Neutron Generator for Explosives Detection	
11:00 AM	Terry Grimm	# 22	Portable High Power X-ray Source Based on a 10 MeV Superconducting Linac	
11:20 AM	Gongyin Chen	# 69	Linatron Mi6, THE X-Ray Source for Cargo Inspection	
11:40 AM	Jessica N Hartman	# 46	Computational Study of Integrated Neutron/Photon Imaging for Illicit Material Detection	
11:45 AM	Sergey Kurennoy	# 371	Intense Combined Source of Neutrons and Photons for Interrogation Based on Compact Deuteron RF Accelerator	

IBA01		Title: General Ion Beam Analysis I		Presido B
		ABS	Chair: Dharshana Wijesundra	
9:45 AM	Wei-Kan Chu	# 174	Rutherford Backscattering Spectrometry: early activities, and future prospect	
10:15 AM	Michael Martin	# 335	Rutherford backscattering analysis of irradiation-enhanced diffusion kinetics and interface formation of uranium bearing diffusion couples	
10:45 AM	Samanthi Wickramarachchi	# 111	Temporal dependence of electron transmission through funnel shaped micro-sized glass capillaries	
11:15 AM	Naresh Deoli	# 293	Sputtering of a liquid Bi:Ga alloy with keV Ar ions	

RE06		Title: Radiation Effects in Ceramic Materials		Presido C
		ABS	Chair: Ming Tang	
9:45 AM	Jianwei Wang	# 163	Multi-scale simulation of structural heterogeneity of swift-heavy ion tracks in complex oxides	
10:15 AM	Tahir Cagin	# 168	Mechanical Properties of Metal Nitrides for Radiation Resistant Coating Applications: A DFT Study	
10:30 AM	Jeff Aguiar	# 57	Nanocomposite Interfaces and their Effects on Defect Evolution following Light Ion Irradiation	
10:45 AM	Cameron Tracy	# 100	Effects of composition on the response of oxides to highly ionizing radiation	
11:15 AM	Chien-Hung Chen	# 218	Heavy Ion Irradiation-Induced Microstructural Change in Helium-Implanted Single Crystal and Nano-Engineered SiC	
11:30 AM	Yuhong Li	# 437	Ne ion irradiation effects on stuffed $\text{Er}_2(\text{Ti}_{2-x}\text{Er}_x)\text{O}_{7-x/2}$ ($x=0-0.667$) structures	

HSD04		Title: Nuclear and Crime Lab Forensics		Travis A/B
		ABS	Chair: Bradley Hart	
9:45 AM	Pat Grant	# 357	Nuclear Forensic Analysis Overview	
10:05 AM	Ken Moody	# 472	Post-explosion exercises and accelerator-produced radionuclides	
10:25 AM	Jean-Claude Diels	# 435	Exploiting the "Power and Precision of Lasers" for nuclear forensics	
10:45 AM	Shaul Barkan	# 387	Silicon Drift Detectors for Specialized Accelerator and Synchrotron Applications	
11:05 AM	Sudeep S Mitra	# 27	Development of a Rapid Field Response Sensor for Characterizing Nuclear Detonation Debris	
11:25 AM	Adam Love	# 171	Incorporating Environmental Lines of Evidence into Nuclear and Criminal Forensics	

NP07		Title: Beam Development for Nuclear Physics and Isotope Production		Travis C/D
		ABS	Chair: Daniel Stracener	
9:45 AM	Meghan Janzen	# 380	On the use of Aluminum Nitride to Improve Aluminum-26 Accelerator Mass Spectrometry Measurements for Earth Science Applications	
10:15 AM	Efraín Chávez	# 144	Monochromatic fast (MeV) neutron "beam" characterization and its use to study elastic scattering in heavy nuclei	
10:40 AM	Jean-Michel Rey	# 298	Positron Generator Developments: A New Setup for CEMHTI	
11:10 AM	Daniel Stracener	# 373	Utilization of a RIB facility for R&D related to radioisotope production	

NBA02		Title: Applications Using Neutron Generators		Bonham B
		ABS	Chair: David Koltick	
9:45 AM	Alex Barzilov	# 420	Material Classification by Analysis of Prompt Photon Spectra Induced by 14-MeV Neutrons	
10:05 AM	Sean MacMullin	# 368	Neutron Generators for Nuclear Recoil Calibration of Liquid Noble Gas TPCs	
10:25 AM	Tracey Wellington	# 183	Recent Fast Neutron Imaging Measurements and Simulations with the Fieldable Nuclear Materials Identification System	
10:45 AM	Haoyu Wang	# 179	A Method to Measure Elemental Gamma-Ray Production Cross Sections Using a 14.1 MeV Associated Particle Neutron Generator	
11:05 AM	Linda Nie	# 175	Application of D-D based Neutron Generator System to Quantify Manganese in Bone In Vivo	
11:25 AM	David Koltick	# 185	Sensitivity of Associated Particle Neutron Elemental Imaging for Cancer Diagnoses	

IBM05		Title: Nanostructuring with Ion Beams		Bonham C
		ABS	Chair: Xin Ou	
9:45 AM	Karl Ludwig	# 157	Silicon and Germanium Nanopatterning and Relaxation Processes during Ion Bombardment	
10:10 AM	Oussama Moutanabbir	# 390	Ion-Slicing of Ultrathin Layers from III-Nitride Bulk Wafers	
10:35 AM	Jacques Gierak	# 29	Focused Ion Beam nano-patterning and single ion implantation perspectives	
11:00 AM	Osman J El-Atwani	# 37	In-situ morphology and surface chemistry studies during nanopatterning of III-V semiconductors via low energy ion beams	
11:25 AM	Iram Saleem	# 355	Ion beam and cluster ion beam engineered nano-metallic substrates for SPR based sensors	
11:40 AM	Satilmis Budak	# 286	Thermoelectric Properties of Zn4Sb3 and ZrNiSn Thin Films Affected by MeV Si ion-beam	

NST09		Title: Cluster Ion Beam Surface Modification		Bonham D
		ABS	Chair: Isao Yamada	
9:45 AM	Jiro Matsuo	# 299	Current Progress and Future Prospects of Cluster Ion Beam Process Technology	
10:15 AM	Noriaki Toyoda	# 60	Advancement of Gas Cluster Ion Beam Processes for Chemically Enhanced Surface Modification and Etching	
10:45 AM	Takaaki Aoki	# 265	Study of multiple collision effects in cluster impact by molecular dynamics simulations	
11:15 AM	Buddhi Tilakaratne	# 277	Gas Cluster Ion Beam Induced Nanostructures on Metal and Alloy Surfaces	

12:30 - 5:00 PM CONFERENCE EXCURSIONS

6:00 PM STUDENT APPRECIATION EVENT

CAARI 2014 SCHEDULE OF EVENTS - THURSDAY MAY 29, 2014

7:00 AM - 4:00 PM	Onsite Registration Open	2nd Floor
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7:00 AM	Continental Breakfast	Lone Star Ballroom
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Plenary Sessions	Lone Star Ballroom
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	PS03	ABS	
8:00 AM	James Johnson	# 483	Advances in Science and Technology for Counter Terrorism
8:45 AM	Frank Garner	# 327	Application of accelerators in nuclear structural materials research: history, present status and challenges

9:30 - 10:00 AM	Break	Lone Star Ballroom
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General Sessions

ATF06			Title: Radiation Generators and Components for Energy and Environmental Applications	Bowie A
		ABS	Chair: Jani Reijonen	
10:00 AM	Brad Roscoe	# 464	Pulsed-Neutron Generator Applications in the Oil Industry	
10:25 AM	Jaakko Hannes Vainionpaa	# 253	Performance and Technology of High Flux Neutron Generator DD110MB	
10:45 AM	Luke Perkins	# 379	A Compact Neutron Generator	
11:05 AM	Arun Persaud	# 268	Ungated Field Ionization Sources for Compact Neutron Generators	
11:25 AM	Alexei Smirnov	# 102	Laser-free RF-Gun as a combined source of THz and ps-sub-ps X-rays	
11:40 AM	Bryndol Sones	# 400	Energy-tunable Parametric X-ray (PXR) production using medical accelerators	

IBA07			Title: PIXE Basics and Applications	Bowie B
		ABS	Chair: Ziga Smit	
10:00 AM	Keizo Ishii	# 107	Study on transfer coefficients of cesium-137 and other elements from soil to plant by γ -ray measurement and PIXE analysis for remediation of Fukushima	
10:30 AM	Tilo Reinert	# 442	High Throughput PIXE for Large Area High Definition Elemental Imaging	
10:50 AM	Carla Iochims	# 18	The PIXE technique: recent applications and trends in Brazil	
11:10 AM	Mikko Ilkka Laitinen	# 259	Large area transition-edge sensor array for particle induced X-ray emission spectroscopy	
11:25 AM	Paulo Jobim	# 33	Using PIXE study Alzheimer Disease induced by neo natal iron administration model in rats	
11:40 AM	Efraín Chávez	# 113	Commissioning and first applications of a new Mexican beam extraction device for PIXE analysis in air.	

RE08			Title: Radiation Effects in Chemical and Biological Systems	Bowie C
		ABS	Chair: Jefferson L. Shinpaugh	
10:00 AM	Jay LaVerne	# 479	Radiation effects in Heavy Ion Radiolysis	
10:25 AM	Susanne Ullrich	# 71	Photoprotective properties of a eumelanin building block: Ultrafast excited state relaxation dynamics in indole	
10:50 AM	Soumen Das	# 453	Inorganic oxygen regulator alleviates radiation induced damage to living systems	
11:15 AM	Sylwia Ptasinska	# 352	Controlling Bond Cleavage in Gas-Phase Biomolecules	
11:40 AM	Eugene Surdutovich	# 408	Advances of the multiscale approach to the assessment of radiation damage with ions	

HSD06			Title: Detectors for Accelerator-Based HS&D Technologies	Travis A/B
		ABS	Chair: Rex Richardson	
10:00 AM	Willy Langeveld	# 386	Scintillators and Electronics for Transmission Z-Spectroscopy (Z-SPEC)	
10:30 AM	Rico Chandra	# 450	Gamma-insensitive fast neutron detection for active interrogation applications	
11:00 AM	Anatoli Arodzero	# 99	Detectors for the new technique of High Energy X-ray cargo inspection	
11:15 AM	Alexander Barzilov	# 52	Study of a Silicon Photomultiplier for Optical Readout of EJ-299-33A Scintillator	
11:30 AM	Wendi Dreesen	# 201	X-ray Radar Imaging Technique Using a 2 MeV Linear Electron Accelerator	
11:45 AM	Vincenzo Variale	# 32	A neutron imager and flux monitor based on Micro Channel Plates (MCP) in electrostatic mirror configuration	

NP08			Title: Physics at RHIC and JLAB	Travis C/D
		ABS	Chair: David Silvermyr	
10:00 AM	Jin Huang	# 343	Long-term detector upgrade plans for RHIC and eRHIC	
10:30 AM	Pawel Nadel-Turonski	# 433	The Electron-Ion Collider (EIC) project at Jefferson Lab	
11:00 AM	Yi Qiang	# 369	Detector Development for Jefferson Lab's 12 GeV Upgrade	
11:20 AM	Achim Franz	# 356	Future upgrades for the PHENIX Experiment at RHIC: From PHENIX to sPHENIX and beyond	
11:40 AM	Joachim Schambach	# 322	A MAPS based micro-vertex detector for the STAR experiment	

NBA03			Title: Nonproliferation Analysis Techniques	Bonham B
		ABS	Chair: Vladimir Mozin	
10:00 AM	Chris Barty	# 93	Introduction and Survey of laser-Compton gamma-ray Source Development for Nuclear Photonics	
10:25 AM	Andrea Schmidt	# 206	Dense Plasma Focus Z-Pinch: A Short-Pulse Neutron Source Concept for Active Interrogation	
10:50 AM	Alan Todd	# 444	Accelerators for Discovery Science and Security Applications	
11:05 AM	Brad Sleaford	# 76	Improved Neutron Capture Gamma-Ray Data and Evaluation	
11:20 AM	Alan Hunt	# 358	Determining isotopic concentrations using delayed gamma-rays from active inspection techniques for nuclear materials safeguards	
11:35 AM	Amber Lynn Guckes	# 51	Modeling of Time Correlated Detection of Fast Neutrons Emitted in Induced SNM Fission	
11:50 AM	Jessica Hartman	# 45	Application of Wavelet Unfolding Technique in Neutron Spectroscopic Analysis	

IBM03			Title: IBMM - Advanced Characterization Capabilities	Bonham C
		ABS	Chairs: Arun Devaraj	
10:00 AM	Robert Ulfig	# 319	Application of Atom Probe Tomography For Studying Irradiation Damage, Ion Beam Implantation, and Related Subjects	
10:25 AM	Tolek Tyliczszak	# 416	Chemical analysis on nanoscale using synchrotron based soft X-ray scanning microscopes	
10:50 AM	Zihua Zhu	# 87	Time-of-Flight Secondary Ion Mass Spectrometry: a Unique Tool for Characterization of Ion Beam Modified Materials	
11:15 AM	Nan Li	# 347	Phase stability and microstructure evolution of the metal-oxide multilayer Fe/Cr-TiO ₂ -Fe/Cr nanocomposite under ion irradiation	
11:40 AM	Sandeep Manandhar	# 459	Influence of ions species on radiation damage of metal/oxide (Cr/MgO) interface	

NST04			Title: Nanostructured Metals and Alloys	Bonham D
		ABS	Chairs: Kaiyuan Yu & Nan Li	
10:00 AM	Khalid Hattar	# 130	Real Time Observation of He Implantation, High-Energy Si Irradiation, and Self-ion Irradiation of Nanocrystalline Au	
10:30 AM	Miao Song	# 311	Ultrafine grained T91 steel processed by equal channel angular extrusion and their response to heavy ion irradiation	
10:50 AM	Kaiyuan Yu	# 495	Response of nanotwinned metals to heavy ion irradiation	
11:20 AM	Di Chen	# 382	Molecular dynamics simulations of defect-boundary interactions in Fe	

12:00 - 1:30 PM LUNCH BREAK

ATF07			Title: Advances in Compact Neutron Generators	Bowie A
		ABS	Chair: Bernhard Ludewigt	
1:30 PM	Jennifer Ellsworth	# 216	Handheld 10 ⁷ DT neutrons/second pulsed neutron generator using a field ionization source	
1:55 PM	Evan Sengbusch	# 140	High Yield, Gas Target Neutron Generator Development at Phoenix Nuclear Labs	
2:15 PM	Paul Schwoebel	# 341	A fluid-based-arc deuteron ion source for neutron generators	
2:30 PM	Allan Xi Chen	# 251	Development and Optimization of a Compact Neutron Generator for Research and Education	
2:45 PM	Ido Silverman	# 468	Preliminary Experiments with a High-Intensity Neutron Source Based on a Liquid-Lithium Target	

RE01			Title: Radiation Effects in Nanostructures and Nanophase Materials	Bowie C
		ABS	Chair: Yongqiang Wang	
1:30 PM	Feng Ren	# 34	Controlling helium in radiation tolerant multilayer and nanochannel materials	
2:00 PM	Tongsik Lee	# 248	Atomistic modeling of mixing and disordering at a Ni/Ni ₃ Al interface	
2:15 PM	Chao-Chen Wei	# 261	Microstructural changes of oxide-dispersion-strengthened alloys under extreme ion irradiation	
2:30 PM	Sanchita Dey	# 439	Analyzing Irradiation Effects on Nano- Yttria Stabilized Zirconia	
2:45 PM	Yongqiang Wang	# 411	Mechanical stability of nanoporous gold under ion irradiation	

NP06		Title: Accelerator Mass Spectrometry I		Travis C/D
		ABS	Chair: Alfredo Galindo-Uribarri	
1:30 PM	Mihaly Molnar	# 412	A mini C-14 AMS with great potential in environmental research in Hungary	
1:55 PM	Philippe Collon	# 410	Accelerator Mass Spectrometry (AMS): From art to Stars	
2:20 PM	Anton Wallner	# 227	AMS and nuclear astrophysics – supernovae signatures and nucleosynthesis in the lab	
2:45 PM	Wolfgang Kretschmer	# 228	Compound specific radiocarbon analysis from indoor air samples via accelerator mass spectrometry	

TA01		Title: Accelerators in Undergraduate Education I		Bonham B
		ABS	Chair: Graham F. Peaslee	
1:30 PM	Daryush Ila	# 8	Ion Beam facility for Research, Service and Education	
1:50 PM	Beatriz Fuentes	# 217	An accelerator in the Faculty of Science of U.N.A.M	
2:10 PM	Fabian Naab	# 244	Ion beam transport simulations for the 1.7 MV tandem accelerator at the Michigan Ion Beam Laboratory	
2:30 PM	Timothy Koeth	# 434	Undergraduate Education with the Rutgers 12-Inch Cyclotron	

IBM07		Title: Ion Irradiation in Fission and Fusion Energy Research		Bonham C
		ABS	Chair: Chintalapalle Ramana	
1:30 PM	Vaithiyalingam Shutthanandan	# 429	Exploring the Radiation Damage Resistance of Nanoscale Interfaces	
1:50 PM	Francisco García Ferré	# 61	Advanced barrier layers for use under extreme corrosion and irradiation conditions	
2:05 PM	Xin Ou	# 297	“Reverse Epitaxy” induced by ion irradiation	
2:25 PM	Gustavo Martinez	# 359	Study of Tungsten-Yttrium Based Coatings for Nuclear Applications	
2:40 PM	Pavana Prabhakar	# 342	Micromechanical Investigation of the Effects of Thermal Shock due to Irradiation in Ferritic-Martensitic Steels	

NST02		Title: Nanoscale Fabrication and Patterning - Part II		Bonham D
		ABS	Chair: John Baglin	
1:30 PM	John Baglin	# 186	Nanoscale Lithography for Few-Nanometer Features using Ion Beams	
2:00 PM	Ettore Bernardi	# 245	Kelvin Probe Microscopy Characterization of Buried Graphitic Channels Microfabricated by MeV Ion Beam Implantation	
2:30 PM	Eric R.C. Morgan	# 290	Ion Beam Analysis of Wet NanoBonding™ of Si-to-SiO2 and SiO2-to-Silica	

3:00 - 3:30 PM	Break	Lone Star Ballroom
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ATF08			Title: Accelerator Facility Updates	Bowie A
		ABS	Chair: Duncan Weathers	
3:30 PM	Bjorn Manuel Hegelich	# 374	Recent achievements in laser-ion acceleration	
4:00 PM	Eric Colby	# 306	DOE Office of Science Accelerator Stewardship Program	
4:15 PM	Dan Gabriel Ghita	# 211	Status on the developments at the tandem accelerator complex in IFIN-HH	
4:30 PM	Volodymyr Storizhko	# 152	Current Status of the IAP NASU Accelerator-Based Analytical Facility	
4:45 PM	Lucas Phinney	# 188	Construction and Characteristics of the High Energy Ion Microprobe system at Amethyst Research, Inc	
5:00 PM	Guy Terwagne	# 431	A new fast and accurate method for accelerator energy calibration	

IBA04			Title: IBA Theory and Simulations	Bowie B
		ABS	Chair: Max Doebeli	
3:30 PM	Ziga Smit	# 17	CORRECT CALCULATION OF ECPSSR IONIZATION CROSS SECTIONS AT LOW IMPACT ENERGIES	
4:00 PM	Maria Grazia Pia	# 184	Geant4 and beyond for the simulation of multi-disciplinary accelerator applications	
4:30 PM	Max Doebeli	# 90	Simulation of MeV ion transmission through capillaries	

RE07			Title: In-Situ Characterization of Radiation Damage	Bowie C
		ABS	Chair: Khalid Hattar	
3:30 PM	Jonathan Hinks	# 313	Direct observation of microstructural evolution in graphitic materials under ion irradiation	
3:55 PM	Patrick Philipp	# 65	Ion microscopy based correlative microscopy techniques for high-sensitivity high-resolution elemental mapping	
4:20 PM	Daniel C Bufford	# 137	Design, implementation, and characterization of a triple beam in situ ion irradiation TEM facility	
4:35 PM	Osman El-Atwani	# 74	Helium-induced bubble formation on ultrafine and nanocrystalline tungsten under different extreme conditions	
4:50 PM	Lucile Beck	# 67	In-situ Raman spectroscopy for investigating modifications in materials under ion irradiation	

AMP05			Title: Fundamental Processes in Collisions involving Molecules	Travis A/B
		ABS	Chair: Tom Kirchner	
3:30 PM	Alain Dubois	# 312	Close coupling CI-approach for (multi-)electronic processes in atomic and molecular keV-collisions	
3:55 PM	Eduardo Montenegro	# 55	Some Dynamical Features of Molecular Fragmentation by Electrons and Swift Ions	
4:20 PM	Roberto Rivarola	# 181	Interaction of multicharged ions with biological molecules	
4:45 PM	Darshika Keerthisinghe	# 66	Transmission of electrons through insulating PET nanocapillaries: Angular dependence	

NBA04			Title: Positron and Electron Studies: Basic Physics & Applications	Bonham B
		ABS	Chair: Antonio Santos	
3:30 PM	Carroll Quarles	# 92	Positron Annihilation Spectroscopy Study of Barnett Shale Core	
4:00 PM	Christopher Baker	# 226	Progress in the design of a 21-cell Multicell Trap for Positron Storage	
4:30 PM	Jose Pacheco	# 224	Electron Beam Transmission through a Cylindrically Symmetric Artificially Structured Boundary	
5:00 PM	Rosa Vlastou	# 132	Neutron induced reactions with the 17 MeV facility at the Athens Tandem Accelerator NCSR "Demokritos"	

TA02			Title: Accelerators in Undergraduate Education II	Bonham D
		ABS	Chair: Graham F. Peaslee	
3:30 PM	Mike Vineyard	# 101	Characterization of Atmospheric Aerosols in the Adirondack Mountains Using PIXE, SEM/EDX, and Micro-Raman Spectroscopies	
3:55 PM	Mark S Driscoll	# 196	Radiation Curing Program	
4:15 PM	Sally Hicks	# 403	Undergraduate Measurements of Neutron Cross Sections	
4:35 PM	Paul DeYoung	# 432	Applications of Ion Beam Analysis to Consumer Product Testing	

7:00 PM CONFERENCE BANQUET - TEXAS BALLROOM (4th FLOOR)

CAARI 2014 SCHEDULE OF EVENTS - FRIDAY MAY 30, 2014

7:00 AM - 4:00 PM	Information Desk Open	2nd Floor
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7:00 AM	Continental Breakfast	Lone Star Ballroom
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Plenary Sessions	Lone Star Ballroom
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	PS04	ABS	
8:00 AM	Doug Wells	# 481	Photon Activation Analysis and its Applications
8:45 AM	Daniel Bardayan	# 159	Overview of Nuclear Astrophysics

9:30 - 10:00 AM	Break	Lone Star Ballroom
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General Sessions

AMP04			Title: Strong Field Physics at Accelerators and Storage Rings	Bowie A
		ABS	Chair: Thomas Stoehlker	
10:00 AM	Reinhold Schuch	# 409	New Opportunities for Atomic Physics with SPARC	
10:30 AM	Alexandre Gumberidze	# 241	Electron- and proton-impact excitation of the heaviest Helium-like ions	
10:50 AM	Yuri Litvinov	# 462	Experiments with stored highly-charged ion at the border between atomic and nuclear physics	
11:20 AM	Siegbert Hagmann	# 345	Single differential projectile ionization cross sections ds/dE_e for 50 A MeV U^{28+} in the ESR storage ring	
11:40 AM	Sergiy Trotsenko	# 262	Two Photon Decay in High-Z He-like Ions	

NP09			Title: Nuclear Astrophysics	Bowie B
		ABS	Chair: Daniel Bardayan	
10:00 AM	Manoel Couder	# 254	Experimental techniques to investigate neutron sources for the s-process	
10:25 AM	Chris Wrede	# 205	Beta decay as a probe of explosive nucleosynthesis in classical novae	
10:50 AM	Steve Pain	# 164	The $^{26}\text{Al}(p,\gamma)^{27}\text{Si}$ reaction at stellar temperatures	
11:15 AM	Lucio Gialanella	# 414	Nuclear astrophysics at the CIRCE laboratory	
11:35 AM	Dan Bardayan	# 73	The JENSA gas-jet target for radioactive beam experiments at ReA3 and FRIB	

RE09		Title: Radiation Effects and Industrial Applications of Electron Accelerators		Bowie C
		ABS	Chair: Marshall Cleland	
10:00 AM	Andrew Palm	# 207	Electron Beam Treatment of Wood Thermoplastic Composites	
10:23 AM	Mark Driscoll	# 209	Electron Beam Assisted Carbon Fiber Composite Recycling	
10:46 AM	Mark Driscoll	# 210	Electron Beam, Wood and the Production of Value Added Products	
11:09 AM	Marshall Cleland	# 480	Recent Advancements in the Applications of Electron Beam Processing in Advanced Technologies	
11:29 AM	Roberto Uribe	# 235	Use of PENELOPE Monte Carlo Code to design a 125 keV electron accelerator irradiator and determine its shielding requirements	
11:44 AM	Marsh Cleland	# 200	Ozone Generation in Air During Electron Beam Processing	

NBA01		Title: Neutron, Photon, and Charged Particles Activation Analysis		Bonham B
		ABS	Chairs: Doug Wells & Valeriia Starovoiatova	
10:00 AM	Christian Segebade	# 455	The Analysis Of Large Samples Using Accelerator Activation	
10:30 AM	Mitja Majerle	# 128	Usage of quasi-monoenergetic and continuous spectrum neutron generators for cross-section measurements and benchmarking	
11:20 AM	Sultan Alsufyani	# 5	Feasibility study of photon activation analysis (PAA) of gold-bearing ores	
11:40 AM	Zaijing Sun	# 115	A Comparison of Various Procedures in Photon Activation Analysis (PAA) with the Same Irradiation Setup	

IBM06		Title: Ion Beam Modification – Interesting Properties		Bonham C
		ABS	Chair: Miguel Crespillo	
10:00 AM	Miguel Crespillo	# 49	An ideal system for analysis and interpretation of ion beam induced luminescence	
10:25 AM	Marta Malo	# 361	Ion/electron induced luminescence for radiation damage process interpretation and in situ material verification	
10:50 AM	Manjula Nandasiri	# 440	Au-implanted CeO ₂ thin films for the selective detection of gases in a harsh environment	
11:15 AM	Paulo Franzen	# 112	Low temperature and decay lifetime photoluminescence of Eu and Tb nanoparticles embedded into SiO ₂	
11:35 AM	Takeru Ohkubo	# 344	Preliminary study on formation of proton microbeam with continuously variable kinetic energy for 3-Dimensional proton lithography	

12:00 - 12:30 PM	CLOSING CEREMONY	Presido B
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CAARI 2014 SCHEDULE OF EVENTS - POSTER SOCIALS

5:30 PM - 7:30 PM	POSTER SOCIAL 1 -- Monday, 5/26	Lone Star Ballroom
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5:00 PM - 7:00 PM	POSTER SOCIAL 2 - Tuesday, 5/27	Lone Star Ballroom
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Invited Posters		ABS	* Will be presented on poster boards Monday through Friday Title
AMP01	T. Lamberton	# 47	Line ratios of soft X-ray emissions following charge exchange between C ⁶⁺ and Kr
AMP01	López Juan	# 178	Process Identification and Relative Cross Sections for Low-keV Proton Collisions in N ₂ and CO ₂ Molecules
AMP01	Mohamed El Ghazaly	# 289	Development of a high resolution Analyzing Magnet System for heavy molecular ions
AMP03	Surendra Poonia	# 6	Origin of L satellites in X-Ray emission spectra of elements with ²⁶ Fe to ⁹² U
AMP03	Antonio Santos	# 28	Production of Multiply Charged Kr Ions by Synchrotron Radiation
ATF04	Jessica Hartman	# 46	Computational Study of Integrated Neutron/Photon Imaging for Illicit Material Detection
ATF04	Sergey Kurennoy	# 371	Intense Combined Source of Neutrons and Photons for Interrogation Based on Compact Deuteron RF Accelerator
ATF05	Ryan Phillips	# 53	Magnetic Control of a Neutralized Ion Beam
ATF05	Carlos Ordonez	# 80	Space-Charge Compressed Ion Beam Equilibrium
ATF05	Ivan Konoplev	# 129	Broadband source of coherent THz radiation based on compact LINAC.
ATF05	Timothy Koeth	# 438	Rapid High Dynamic Range Dose Profiling at the University of Maryland Radiation Facility's E-Beam.
IBM02	Nand Lal Singh	# 64	Effect of Swift Heavy Ion Irradiation on Dielectric, Thermal and Structural Properties of Metal/Polymer Composites
IBM02	Noriaki Matsunami	# 232	Ion irradiation effects on WN _x O _y films
IBM03	sandeep manandhar	# 459	Influence of ions species on radiation damage of metal/oxide (Cr/MgO) interface
IBM04	John-William Warmenhoven	# 162	Modeling the Transport of Secondary Ion Fragments Into a Mass Spectrometer Through Ambient Pressure Using COMSOL Multiphysics Simulation Software
IBM04	Julien Demarche	# 165	Ambient Pressure MeV-SIMS analysis of contaminated PTFE aerosol filters
IBM05	S. Budak	# 286	Thermoelectric Properties of Zn ₄ Sb ₃ and ZrNiSn Thin Films Affected by MeV Si ion-beam
MA03	Robert Cywinski	# 337	The Potential of a Compact Accelerator for Low Energy Production of Copper Isotopes
NBA03	Jessica Hartman	# 45	Application of Wavelet Unfolding Technique in Neutron Spectroscopic Analysis
NP02	AJAY SHARMA	# 231	Relativistic mass of secondary neutrons in fission and fragments in fusion.
NP06	Wolfgang Kretschmer	# 228	Compound specific radiocarbon analysis from indoor air samples via accelerator mass spectrometry
NST01	Daryush ILA	# 7	Nano-crystal Formation and Growth from High Fluence Ion Implantation of Au, Ag, or Cu in Silica or MgO
NST01	Sunil Deshpande	# 150	Pair Distribution Function Analysis of nanocrystalline ZnS and CdS
NST01	S. Budak	# 285	Thermoelectric and Optical Properties of SiO ₂ /SiO ₂ +Au Multilayer Thin Films Affected by Thermal Annealing
RE04	Barney Doyle	# 446	Degradation of GaAs Photovoltaics Exposed to Reactor Neutrons and Accelerator Ions

Regular Posters			* Will be presented on poster boards Monday through Wednesday
		ABS	Title
AMP01	Angelin John	# 1	Negative ion formation in Ion-Molecule collisions
AMP01	Kiattichart Chartkunchand	# 354	Investigations of Fast-Moving Ion Kinematic Effects in Velocity-Map Imaging Spectroscopy
AMP01	Jim Perez	# 418	Single electron capture by highly charged ions from H ₂ O, CO ₂ and HF.
AMP03	Surendra Poonia	# 19	Origin of Lbeta2 X-Ray satellites spectra of 4d transition metals for lead as predicted by HFS calculations
AMP03	Surendra Poonia	# 20	Theoretical calculation of Lb ₁ Satellites in X-Ray Emission Spectra of 3d transition elements
AMP03	Tom Kirchner	# 118	Bare- and dressed-ion impact collisions from neon atoms studied within a nonperturbative mean-field approach
AMP03	Tom Kirchner	# 119	Time-dependent density functional theory study of correlation in proton-helium collisions
AMP03	Tom Kirchner	# 121	Independent-particle and independent-event calculations for 1.5 MeV/amu O ⁸⁺ -Li collisions
AMP03	Steven Manson	# 332	Double Ionization in Ion-Atom Collisions: Mechanisms and Scaling
AMP03	Ioannis Madesis	# 463	Atomic Physics with Accelerators: Projectile Electron Spectroscopy (APAPES) *
AMP05	Tom Kirchner	# 120	Quantum-mechanical study of ionization and capture in proton-methane collisions
AMP05	Katianne Alcantara	# 338	Outer-shell double photoionization of CH ₂ Cl ₂
ATF01	Vladimir Kovivchak	# 238	Surface morphology of brass and bronze treatment by high power ion beam nanosecond duration
ATF01	Robert Cywinski	# 366	Studies of the Thorium-Uranium Fuel Cycle
ATF01	Mariet Hofstee	# 445	Commissioning of an in-air irradiation facility with a 30 MeV/A Xenon Beam
ATF02	Robert Cywinski	# 363	PIP: a compact recirculating accelerator for the production of medical isotopes
ATF02	Adriana Bungau	# 395	High Intensity Cyclotron for the ISODAR experiement
ATF02	Ibtesam Badhrees	# 477	The Perspectives of the Boron Neutron Capture Therapy-Clinical Applications Research and Development in Saudi Arabia
ATF03	Conor Pogue	# 180	Design of THz Free Electron Laser Oscillator Cavity
ATF03	Justin Comeaux	# 292	Results of the SRF Wafer Test Cavity for the Characterization of Superconductors
ATF05	Franz Aguirre	# 59	Radial Expansion of a Low Energy Positron Beam Passing Through a Cold Electron Plasma Within a Uniform Magnetic Field.
ATF05	Alex Treacher	# 215	Multiple Aperture-Based Antihydrogen Parallel Plate Gravity Experiment
ATF06	Ryan Lane	# 63	Particle Diffusion along Magnetic Null Lines as Sputter or Antiproton Source
ATF06	Ryan Hedlof	# 68	Artificially Structured Boundary as a Charged Particle Beam Deflector Shield
ATF07	Cory Waltz	# 203	A High-Flux Neutron Generator Facility for Geochronology and Nuclear Physics Research
ATF07	Qing Ji	# 208	Development of A Time-tagged Neutron Source for SNM Detection
ATF07	Donald Swenson	# 294	RFI-Based Ion Linac Systems
ATF08	Oscar de Lucio	# 117	Advances in the Development of Positron Beams at the 5.5 MV Van de Graaff Accelerator, IFUNAM
ATF08	zhihui Li	# 125	Status of the CS-30 Cycltron at Sichuan University and the beam optic design of the external target beam line.
ATF08	Thomas Hunt	# 204	Automatic Frequency Control of a Sub-Harmonic Bunching Cavity

Regular Posters Continued		* Will be presented on poster boards Monday through Wednesday	
		ABS	Title
ATF08	Szabolcs Szilasi	# 267	Development of an electrostatic quadrupole doublet system for focusing fast heavy ion beams
ATF08	Adriana Bungau	# 370	Induced Activation in Accelerator Components for the European Spallation Source
HSD02	Philip Martin	# 172	Active Detection of Shielded Special Nuclear Material In the Presence of Variable High Backgrounds Using a Mixed Photon-Neutron Source
IBA01	Olga Vilkhivskaya	# 35	Fundamentals of the layer-by-layer chemical analysis of heterogeneous samples by secondary ions energy-mass spectrometry method
IBA01	Bun Tsuchiya	# 291	Temperature dependence on vapor and hydrogen absorption characteristics of lithium-zirconium-oxide ceramics
IBA01	Gyanendra Bohara	# 303	Comparison of thicknesses of deposited copper thin films on silicon substrate using thin film monitor, profilometer and Rutherford backscattering spectroscopy.
IBA01	U. Tippawan	# 471	Establishment of an ASEAN ion beam analysis center at Chiang Mai University for novel materials analysis
IBA02	Sergey Dedyulin	# 202	Accurate 50-200 keV proton stopping cross sections in solids
IBA02	Camilo Correa	# 249	Description of Ge, Sm, Hf, Ta, and Au ultra-thin targets by Rutherford back-scattering technique for atomic inner K shell ionization studies.
IBA02	Bob Cywinsky	# 367	The UK MEIS facility - a new future at the IIAA, Huddersfield
IBA03	Bun Tsuchiya	# 123	Dynamic measurements of hydrogen and lithium distributions in lithium-cobalt-oxide films during heating and charging using elastic recoil detection techniques
IBA04	A. Stamatopoulos	# 176	Benchmarking the proton elastic scattering cross sections on ^{19}F and ^{10}B using DE/E silicon telescopes
IBA04	Karur Padmanabhan	# 273	Rainbow effect in ion channeling through a single layer of graphene
IBA06	Lidija Matjacic	# 362	Chemical characterisation of explosives residues by Ambient Pressure MeV-SIMS
IBA07	M. Roumie	# 105	PIXE Determination of the Stoichiometry of Ni-Pd and Au-Ag Nano-Particles Prepared by Laser Ablation in Liquid Solution
IBA07	Oleksandr Buhay	# 151	PIXE Analysis of Powder and Liquid Uranium-Bearing Samples
IBA07	Jeremy Smith	# 193	Analysis of Atmospheric Aerosols Collected in an Urban Area in Upstate NY Using Proton Induced X-ray Emission (PIXE) Spectroscopy
IBA08	M. Roumie	# 104	PIXE identification of pottery production from the necropolis of Jiyeh archaeological site
IBA08	S. Younger-Mertz	# 177	Ion Beam Analyses of Microcrystalline Quartz Artifacts from the Reed Mound site (ca. 1200 A.D.), Delaware County, Oklahoma
IBM01	Zhongying Xue	# 40	The reduction of the critical H implantation dose for ion-cut by incorporating B doped SiGe/Si superlattice into Si substrate
IBM01	Miao Zhang	# 41	Sharp crack formation in low fluence hydrogen implanted epitaxial Si/B-doped $\text{Si}_{0.70}\text{Ge}_{0.30}/\text{Si}$ structures
IBM01	jack Manuel	# 139	Raman and ion channeling damage analysis of high energy He implanted Si temperature dependence
IBM01	Szabolcs Szilasi	# 213	Optimization of irradiation parameters of heavy ion implantation for diamond growth on silicon
IBM01	Vikas Baranwal	# 315	Synthesis of low dimensional embedded Ge nanostructures
IBM01	Mangal Dhoubhadel	# 323	The technical difficulties to synthesize staggered multi-layer low energy ion deposition for synthesis of metal nanostructure in Si.
IBM01	Bimal Pandey	# 419	Phase Changes of Zn and Si Due to Ion Implantation and Thermal Annealing.
IBM02	N. MANIKANTHABABU	# 16	Synthesis, characterization and radiation damage studies of high-k dielectric (HfO_2) films for MOS device applications
IBM02	V Vendamani	# 48	Tunable Resonant Reflected Wavelength of Porous Silicon based DBR Structures Prepared by Radiation Treated Silicon
IBM02	N Manikanthababu	# 317	Ge nanocrystals embedded in HfO_2 synthesized by RF sputtering followed by RTA or SHI irradiation
IBM02	Vikas Baranwal	# 391	Swift heavy ions induced self-organization of LiF Surface
IBM02	Vikas Baranwal	# 396	Origin of cracks on BaF_2 thin film surface under swift heavy ion irradiation

Regular Posters Continued		* Will be presented on poster boards Monday through Wednesday	
		ABS	Title
IBM03	ChienHsu Chen	# 21	TEM and Raman Study of GeMn Recrystallized by Helium IBIEC
IBM03	Amanda Lupinacci	# 54	In-Situ SEM Characterization of Irradiated Stainless Steel
IBM04	Chien-Hung Chen	# 154	Channeling and stopping power issues in the study of heavy ion irradiation in MgO
IBM05	S. Budak	# 284	Effects of MeV Si Ions and Thermal Annealing on Thermoelectric and Optical Properties of SiO ₂ /SiO ₂ +Ge Multi-Nanolayer Thin Films
IBM05	Yanzhi He	# 384	Surface enhanced Raman substrates fabricated by gold ion implantation in quartz
MA02	Prof. Oliver Heid	# 156	Novel electrostatic accelerator
NBA01	S. Williams	# 56	Analysis of ZDDP content and thermal decomposition in motor oils using NAA and NMR
NBA02	Bernhard Ludewigt	# 274	Delayed Gamma-ray Spectroscopy for Non-destructive Assay of Nuclear Materials
NBA02	Haoyu Wang	# 365	A Method to Measure Prompt Gamma-Ray Production Cross Sections Using a 14.1 MeV Associated Particle Neutron Generator.
NP01	Efraín Chávez	# 145	MOmentum Neutron DEtector (MONDE)
NP01	Jon Batchelder	# 470	Low Energy Levels in the neutron-rich ^{120,122,124,126} Cd Isotopes
NP01	Jean-Michel Rey	# 474	Positron generator developments: A new setup for CEMHTI
NP03	Jiri Vacik	# 266	Study of neutron induced reactions on ⁷ Be using large angle coincidence spectroscopy
NP04	David Wootan	# 110	How to Produce a Reactor Neutron Spectrum Using a Proton Accelerator
NP05	Renu Gupta	# 10	Total charge changing cross-sections of 300 A MeV Fe ²⁶⁺ ion beam in different target media
NP07	Mayir Mamtimin	# 84	Neutron Time-of-Flight Measurements; Comparison with Monte Carlo Simulations at the Idaho Accelerator Center
NP07	J.H. Kim	# 86	Numerical Simulation of a multicusp ion source for high current H ⁻ Cyclotron at RISP
NP11	Ran Chu	# 487	Formation of large cluster anions of Cu with a Cs-sputtering source
RE01	Osman El-Atwani	# 75	Tungsten response to transient heat loads generated by laser pulses
RE01	Vladimir Uglov	# 393	Physical properties and radiation stability of nanoparticles
RE02	Frank Garner	# 326	Neutron-atypical phenomena operating in ion simulations of neutron-induced void swelling that complicate the ion-neutron correlation and prediction of neutron-induced swelling
RE04	Jian Ding	# 4	Electronic energy convergence phenomena
RE06	Y. C. Yu	# 127	Metastability of tetragonal zirconia nanoparticle by Sol-Gel-Derived method coupling with carbon irradiation
RE06	Joseph Tesmer	# 372	Coloration of Lithium Hydride with Alpha Particle Radiation (U)
RE06	Juan Wen	# 389	Heavy and light ion irradiation damage effects on delta-phase Sc ₄ Hf ₃ O ₁₂
RE08	Azida Walker	# 276	Changes in Mechanical properties of Rat Bones under simulated effects of Microgravity and Radiation
TA01	Randolph Peterson	# 426	RBS Study of the Behavior of PMMA as a Negative Resist for Particle Beam Lithography
TA02	Gopichand Dharne	# 394	Step-by-Step Analysis of Powder XRD Data: A PG Level Experiment
IBA01	Barney Doyle	# 494	Triassico: A Sphere Manipulating Apparatus for IBA