

Conference Schedule

Sunday, Aug. 30		Palazzo Bo – Aula Magna	
18:00	Registration and Welcome Party		
21:00			
Monday, Aug. 31		Palazzo Bo – Aula Magna	
8:00	Registration		
9:00	Opening		
9:30	REI Award		
9:50	K1	Mazzoldi, P.	30 years of REI: history and perspective
10:30	<i>Coffe Break</i>		
11:00	I1	Devanathan, R.	Dynamic simulation of collision cascades and thermal spikes in ceramics
11:40	O1	Uberuaga, B.	On the role of kinetics in the disordering and reordering of pyrochlores during irradiation
12:00	O2	Grimes, R.	Predicted structure and stability of $A_4B_3O_{12}$ delta-phase compositions
12:20	I2	Lang, M.	Response of $A_2B_2O_7$ pyrochlore to irradiation and pressure: a new high-pressure phase
13:00	<i>Lunch</i>		
14:50	O3	Yasuda, K.	Accumulation of disordered zone in $MgAl_2O_4$ irradiated swift heavy ions
15:10	O4	Schuster, B.	Phase transformation of ZrO_2 induced by ion irradiation at high pressure
CANC	O5	Costantini, J.	Defects and swelling induced in Yttria-stabilized Zirconia by swift heavy ion irradiations
15:30	O6	Nastasi, M.	Ion beam enhanced crystallization of sol-gel TiO_2 films
15:50	O7	Alves, E.	Damage recovery and optical activity of Europium implanted wide gap oxides
16:10	O8	Iwase, A.	Effects of swift heavy ion irradiation on the structure of Er_2O_3 -doped CeO_2
16:30	<i>Coffe Break</i>		
17:00	Poster Session A		
19:00			

Tuesday, Sept. 1		Palazzo Liviano - Sala dei Giganti	
8:30	I3	Brusa, R.	Study of defects in implanted silica glass by Depth Profile Positron Annihilation Spectroscopy
9:10	O9	Popov, A.	Basic Properties of Radiation-Induced Point Defects in Halides and Oxides
9:30	O10	Smith, R.	The relationship between displacement energy threshold and Frenkel pair formation energy in ionic systems
9:50	O11	Kotomin, E.	First-principles calculations of point defects ABO ₃ perovskites
10:10	<i>Coffe Break</i>		
10:40	O12	Pakarinen, O.	Structure of swift heavy ion tracks and their use in nanocluster modification, studied with molecular dynamics
11:00	O13	Bishop, C.	Modelling cascade events in uranium dioxide
11:20	O14	Comins, J.	Defects production in Tin doped Indium Oxide (ITO) films induced by 1 MeV proton bombardment
11:40	O15	Weber, W.	Insights on irradiation-induced amorphization in silicon carbide
12:00	O16	Pathak, A.	Moved to Wed. Sept. 2, 15:30
12:10	<i>Lunch</i>		
14:00	<i>Excursion</i>		
19:30			

**Wednesday,
Sept. 2 Palazzo Bo – Aula Magna**

9:00	K2	Toulemonde, M.	Attosecond electronic excitation by swift heavy ions: material modifications at the nanometer scale
9:40	O17	Skuratov, V.	In situ and post-radiation analysis of mechanical stress in Al ₂ O ₃ :Cr induced by swift heavy ion irradiation
10:00	O18	Matsunami, N.	Ion irradiation effects on tungsten-oxide films and charge state effect on electronic erosion
10:20	O19	Domaracka, A.	Infrared study of astrophysical ice analogues irradiated by swift nickel ions
10:40	<i>Coffe Break</i>		
11:10	I4	Kluth, P.	Ion tracks and density fluctuations in swift heavy ion irradiated silica
11:50	O20	Benyagoub, A.	Phase transformations induced by swift heavy ions
12:10	O21	Osmani, O.	Heat transport mechanisms in swift heavy ion irradiated insulators
12:30	O22	Liu, X.	Thermodynamics of fission products in dispersion fuel designs – modeling from first-principles and atomistics
13:00	<i>Lunch</i>		
14:30	I5	Chen, F.	Optical waveguides in Nd:YAG transparent ceramics produced by ion implantation
15:10	O23	Gischkat, T.	Comparative study of damage formation in lithium niobate due to the nuclear and electronic energy loss
15:30	O16	Pathak, A.	Effects of SHI on band gap of strained AlGa _N /Ga _N multi quantum wells
	(O24	Olivares, J.	Moved to Poster Session C)
15:50	O25	Elliman, R.	The fabrication of optically active silica nanowires by ion-implantation
16:10	O26	De Bastiani, R.	Ion irradiation-induced selective bonds breaking in chalcogenides glasses
16:30	<i>Coffe Break</i>		
17:00	Poster Session B		
19:00			

**Thursday,
Sept. 3**

Palazzo Bo – Aula Magna

9:00	K3	Bernas, H.	Can ion beams control nanostructures in insulators?
9:40	O27	Takeda, Y.	Spectral dependence of optical nonlinearity of metal nanoparticles fabricated by ion implantation
10:00	O28	Behar, M.	Photoluminescence from Ge nanocrystals produced by hot implantation into SiO ₂
10:20	O29	Maurizio, C.	Au implantation in Er-implanted silica: effect of the Au dose and specific annealing treatments in controlling the Au clusterization process

10:40 *Coffe Break*

11:00	I6	Avasthi, D.K.	Ion tracks in silica for engineering the embedded nanoparticles
11:40	O30	Ridgway, M.	Metal nanoparticle elongation by swift heavy-ion irradiation
12:00	O31	Rizza, G.	Saturation of the ion-hammering effect for large non-hydrostatic capillarity stresses
12:20	O32	Amekura, H.	Irradiation effects of swift heavy ions on Zinc and Zinc-Oxide nanoparticles
12:40	O33	Tribedi, L.	Fast Ion collisions with fullerenes and solids: influence of collective resonance

13:00 *Lunch*

14:30	I7	Kishimoto, N.	Nano-patterned ion implantation into insulators with porous alumina masks
15:10	O34	Kulkarni, V.	The influence of insulating substrate on the electrical measurements of FIB fabricated electrodes with nano gap spacing
15:30	O35	Jensen, J.	Modification of anatase TiO ₂ thin films by a Focused Ion Beam
15:50	O36	Chiarini, M.	High definition surface micromachining of LiNbO ₃ by ion implantation
16:10	O37	Aumayr, F.	Nano-hillock formation due to impact of highly charged ions on HOPG

16:30 *Coffe Break*

17:00

| **Poster Session C**

19:00

20:00

| **Conference Dinner**

23:00

Friday, Sept. 4			
Palazzo Bo – Aula Magna			
9:00	I8	Garrido, F.	Radiation tolerance of fluorite-structured oxides submitted to swift ion irradiation
9:40	O38	Surraud, E.	Dynamical hierarchical methods for the irradiation of clusters and molecules in contact with an environment
10:00	O39	Zagorskiy, D.	Ensembles of metallic wires obtained as replicas of etched ion tracks in polymer matrixes: structure and properties
10:20	O40	Di Girolamo, G.	Metal ion implantation in inert polymers for strain gauge applications
10:40	<i>Coffe Break</i>		
11:10	O41	Fraboni, B.	Influence of ion irradiation on the transport properties of Organic Field-Effect Transistors
11:30	O42	Xue, J.	Ion current oscillations inside a single ion track nanopore
11:50	O43	Baragiola, R.	Electrostatic charging in particle-insulator collisions
12:10	O44	Brusatin, G.	Radiation sensitive patternable hybrid organic-inorganic materials for micro- and nano- patterning
12:30	REI Young Researcher Award		
12:50	Closing Remarks		