Tutorials and Topical Lectures:

Chikang Li, *Exploring HED physics, ICF dynamics and lab astrophysics with advanced nuclear diagnostics*, Massachusetts Institute of Technology (MIT), Plasma Science and Fusion Center

Hans Meister, *Bolometer Developments in Diagnostics*, ITER Technology & Diagnostics, Max-Planck-Institut f. Plasmaphysik, Garching

Fabrizio Nicastro, *Detection of the missing baryons by studying the lines from the Warm Hot Intergalactic Medium (WHIM)*, INAF/OAR, Rome

Roberta Fantoni, *In situ and remote laser diagnostics for material characterization from plasma facing components to Cultural Heritage surfaces*, ENEA Frascati

Invited Talks:

Beam Plasmas and Inertial Fusion (BPIF)

Luca Antonelli, *X-ray Phase Contrast Imaging as diagnostic for high energy density physics*, University of York

Didier Raffestin, *First results from Academic diagnostics on LMJ/PETAL*, CELIA, Bordeaux

Xing Zhang, *X-ray temporal and spatial diagnosis technology in ShenGuang laser facilities*, Laser Fusion Research Center, China Academy of Engineering Physics, Mianyang City, Sichuan Province

Tammy Ma, *X-Ray Analysis Group of the ICF programme at NIF*, LLNL

Magnetic Confinement Fusion (MCF)

Naoki Tamura, *Versatility and Flexibility of the Tracer-Encapsulated Solid Pellet as a Diagnostic Tool in Magnetic Fusion Plasmas*, the TJ-II team, the W7-X team, the LHD Experiment Group1

Haiqing Q. Liu, *Real-time Control of Plasma Parameters with Measurements by Faraday-effect Polarimetry on EAST tokamak*, Institute of Plasma Physics, Chinese Academy of Sciences, Hefei, Anhui 230031

Marco Tardocchi, *High rate neutron and gamma-ray spectroscopy in magnetic fusion*, CNR Milano

M.A. Van Zeeland, *Imaging Neutral Particle Analyzer Measurements of the Confined Fast Ion Profile and Instability Induced Transport in DIII-D*, General Atomics, San Diego

Invited Talks (cont.):

Low-Temperature and Industrial Plasmas (LTIP)

Grant Ritchie, *Cavity enhanced laser spectroscopy of oxidation chemistry in atmospheric pressure plasmas*, Oxford University

Jean-Paul Booth, *Vacuum ultraviolet absorption spectroscopy of oxygen discharge*, LPP, École Polytechnique

Pavel Dvorak, *Fluorescent measurements of atomic species in discharges and flames (H, N, O, Pb, Bi, Sn and Te)*, MUNI, Masaryk University

Paolo Francesco Ambrico, *N2/O2 single streamer discharge studies by OPO based TALIF and LIF diagnostics*, CNR NANOTEC, Lecce

Basic and Astrophysical Plasmas (BAP)

Giulio Del Zanna, *X-ray spectroscopy of Solar plasma*, Cambridge

Paolo Bastia, *Transition Edge Sensors, detectors providing the highest spectral resolution (few eV) in X-ray astronomy*, Thales Alenia Space, Milan

Junjie Mao, *The impact of improved plasma diagnostics on modeling the X-ray Universe*, Glasgow Strathclyde University, Glasgow

Session in memory of Anatoly FAENOV (X-ray spectroscopy and X-ray imaging):

Sergey Pikuz, *Development of X-ray imaging methods using spherically bent crystals (for HEDP)*, Osaka University

Yuji Fukuda, *Relativistic laser plasma of gas cluster targets - particle and X-ray diagnostics*, KPSI

Francesco Flora, *X-ray imaging (of bio/medical) samples using laser-plasma-based X-ray sources/ LiF detector*, ENEA Frascati

Dieter Hoffmann, *Radiation diagnostics of dense plasmas created by heavy ion beams*, GSI Darmstadt

Michel Koenig, *X-ray diagnostics in laboratory astrophysics*, LULI École Polytechnique

Frank Rosmej, *Hollow atom X-ray spectroscopy / X-ray spectroscopy in experiments with XFEL and laser produced plasmas*, UPMC, Paris

Arie Zigler, *Diagnostics in relativistic laser pulse interaction with mass-limited/nanostructured media*, Hebrew University of Jerusalem