

Future Challenges in Plasma Physics

All presentations: 20 min = 15 min (talk) + 5 min (discussion)

13.00 - 13.10 Welcome, Uwe Czarnetzki (Ruhr-University Bochum)

Session I, Chair: Bill Graham

13.10 – 13.30 Gerrit Kroesen (TU Eindhoven)

“Plasma regimes: An exploration of physics challenges”

13.30 – 13.50 Pascal Chabert (Ecole Polytechnique)

“What could be the role of numerical simulations in our field?”

13.50 – 14.10 Igor Kaganovich (Princeton Plasma Physics Laboratory)

"Overview of Report on Frontiers of Plasma Science Sponsored by the
U.S. Department of Energy, Office of Fusion Energy Sciences."

14.10 – 14.30 Luís Alves (Instituto Superior Técnico)

"Low-temperature plasmas: old drives, new directions".

14.30 – 15.00 Coffee break

Session II, Chair: Gerrit Kroesen

15.00 – 15.20 Bill Graham (Queen's University Belfast)

“Is there any new plasma physics to be found low temperature plasmas?”

15.20 – 15.40 Peter Bruggeman (University of Minnesota)

"Key scientific questions on the path to saving the world with plasmas:
A personal perspective"

15.40 – 16.00 Michael Bonitz (CAU Kiel)

"When a solid meets a plasma - challenges for theory"

16.00 - 16.20 Thomas Sunn Pedersen (Max-Planck-Institute for Plasma Physics)

"From low to high - plasma physics at the edge of fusion plasmas"

16.20 - 16.35 Short break

Session III, Chair: Peter Bruggeman

16.35 – 16.55 Masaru Hori (Nagoya University)

“Challenge towards controlling atomic level interactions of plasma with surfaces”

16.55 – 17.15 Yi-Kang Pu (Tsinghua University)

“Role of education in advancing plasma science”

17.15 – 17.45 Mark Kushner (University of Michigan)

“The path forward: Summary and Discussion”