PLASMA SCHOOL
Bad Honnef

PROGRAM OF THE SCHOOL 2020

GENERAL INFORMATION

The school will be a mixture of live presentation within a conference system at a given time, pre-recorded lectures and interactive sessions with questions and answers.

Live presentations can be joined using the link published within the internal area of the summer school. The conference system will be zoom. Every day a new link will be provided, with which participants can join the lecture.

Here are some useful rules for a smooth processing:

- dial in punctually, preferably a few minutes before the start. Type your name when you are prompted to do so. If you dial in (again) during the community meeting, please do so without comment
- deactivate your camera and mute your microphone
- register via the meeting chat if you want to ask a question or make a comment. If the moderator calls you, you can activate your microphone.

The introduction about plasma physics given by Prof. von Keudell will be available from September 24th on and can be participated by oneself without any time limit. The link will be sent to all participants at the mentioned date. All other presentations are live presentations and available at the specified time published in the program of the school. Questions about the introductory presentation of Prof. von Keudell is planned for October 5th, 10 am. Participation in live presentations always have the option to discuss questions directly or after the presentation. The lecturer will inform the participants before the presentation how to proceed the questions.

PLASMA PRIMER
TO BE AVAILABLE AS VIDEO LECTURES ONE WEEK BEFORE THE SCHOOL

Introduction I: Fundamentals of Plasma Physics (*A. von Keudell, Bochum*)
Introduction II: Fundamentals of Plasma Physics (*A. von Keudell, Bochum*)

MODELLING - MONDAY OCTOBER 5TH

9:45	Welcome and introduction (*M. Böke & M. Prenzel, Bochum & R. Engeln and A. Sobota, Eindhoven*)
10:00-10:30	Q&A Introduction (*A. von Keudell, Bochum*)
10:30	Plasma modelling I: General overview (*A. Bogaerts, Antwerp*)

SOURCES I, TUESDAY OCTOBER 6TH

9:00	Plasma sources I: Non magnetized radio-frequency discharges (*P. Chabert, Paris*)
11:00	Plasma sources II: DBDs (Corona and barrier discharges) (*O. Guaitella, Paris*)

PRACTICAL DAY, WEDNESDAY OCTOBER 7TH

9:00	Plasma modelling II: Electron kinetics in collisional plasmas (the Boltzmann approach) (*L.L. Alves, Lisbon*)
	Modelling Workshop: Hands-on excercise (*L.L. Alves, Lisbon*)

SOURCES II, THURSDAY OCTOBER 8TH

8:00	Plasma sources III: High pressure thermal plasmas and sources (*A. Murphy, Sydney*)
	Plasma sources IV: High pressure thermal plasmas and sources- Diagnostics and Applications (*A. Murphy, Sydney*)

DIAGNOSTICS I, MONDAY OCTOBER 12TH

9:00	Plasma diagnostics I: Basics of plasma spectroscopy (*V. Schulz-von der Gathen, Bochum & S. Iséni, Orléans*)
11:00	Plasma diagnostics II: Measuring electron density and ion flux (*F. Iza, Loughborough*)

DIAGNOSTICS II, TUESDAY OCTOBER 13TH

9:00	Plasma diagnostics III: Advanced optical diagnostics (*R. Engeln, Eindhoven*)
11:00	Plasma diagnostics IV: Plasma-Surface Interactions (*J. Benedikt, Kiel*)

PRACTICAL DAY, WEDNESDAY OCTOBER 14TH

9:00	to be announced

TECHNOLOGIES, THURSDAY OCTOBER 15TH

12:00	Plasma technologies I: Material processing (*G. Henrion, Nancy*)
14:00	Plasma technologies II: Developments at high pressure and in liquids (*P. Bruggeman, Minnesota*)