

Program of the School 2019

Saturday, Oct. 5: Arrival/Registration 17.00 - 21.00 (dinner included)

Sunday, Oct. 6:

08.45-09.00	Welcome and introduction (Plot of the School, Plasma Science) (<i>M. Böke, Bochum & R. Engeln and A. Sobota, Eindhoven</i>)
09:00-10.30	Introduction I: Fundamentals of Plasma Physics (<i>A. von Keudell, Bochum</i>)
10.30-10.45	Coffee break
10.45-12.15	Introduction II: Fundamentals of Plasma Physics (<i>A. von Keudell, Bochum</i>)
12.30-13.30	Lunch
13.45-15.15	Plasma modelling I: Modelling of plasmas (<i>A. Bogaerts, Antwerp</i>)
15.15-15.30	Coffee break
15.30-17.00	Plasma sources I: Non magnetized radio-frequency discharges (<i>P. Chabert, Paris</i>)
17.00-17.30	Forum with teachers
18.30-20.00	Dinner
20.00-21.00	Evening lecture: History of plasma physics (<i>H. Kersten, Kiel</i>)

Monday, Oct. 7:

09.00-10.30	Plasma modelling II: Electron kinetics in atomic and molecular plasmas (<i>L.L. Alves, Lisbon</i>)
10.30-10.45	Coffee break
10.45-12.15	Plasma modelling III: Fluid modelling of discharge plasmas (<i>L.L. Alves, Lisbon</i>)
12.30-13.30	Lunch
13.45-15.15	Plasma diagnostics I: Basics of plasma spectroscopy (<i>V. Schulz-von der Gathen, Bochum</i>)
15.15-15.30	Coffee break
15.30-17.00	Plasma diagnostics II: Measuring electron density and ion flux (<i>N. Braithwaite, Milton Keynes</i>)
17.00-17.30	Forum with teachers
18.30	School Dinner
20.00-21.00	Scientific writing: 20 min of theory and 40 min of practice (<i>A. von Keudell, Bochum</i>)

Tuesday, Oct. 8:

09.00-10.30	Plasma sources II: High pressure thermal plasmas and sources (<i>A. Murphy, Sydney</i>)
10.30-10.45	Coffee break
10.45-12.15	Plasma sources III: High density magnetized plasma sources (<i>U. Czarnetzki, Bochum</i>)
12.30-13.30	Lunch
14.00-evening	Excursion or Workshops Modelling Workshop: Hands on a Boltzmann solver (<i>L.L. Alves, Lisbon</i>)

	Experimental Workshop: "How to get plasma parameters? From theory to reality" (<i>G. Henrion & O. Guaitella, "Réseau Tech. Plasmas Froids", France</i>) Experimental Workshop: "Spectroscopic instruments and their application" (<i>V. Schulz-von der Gathen, P. Preissing, Bochum</i>)
18.30-20.00	Dinner
20.00-21.00	Poster session

Wednesday, Oct. 9:

09.00-10.30	Plasma technologies I: Material processing (<i>G. Henrion, Nancy</i>)
10.30-10.45	Coffee break
10.45-12.15	Plasma sources IV: DBDs (Corona and barrier discharges) (<i>O. Guaitella, Paris</i>)
12.30-13.30	Lunch
13:45-15:15	Plasma diagnostics III: Advanced optical diagnostics (<i>R. Engeln, Eindhoven</i>)
15.15-15.30	Coffee break
16:00-17:30	Demonstration on emission spectroscopy (<i>V. Schulz-von der Gathen, Bochum, and O. Guaitella, Paris</i>)
17.30-18.00	Forum with teachers
18.30	Dinner
20.00-21.00	Scientific writing follow-up: feedback and discussion (<i>A. von Keudell, Bochum</i>)

Thursday, Oct. 10:

09.00-10.30	Plasma diagnostics IV: Plasma-Surface Interactions (<i>J. Benedikt, Bochum</i>)
10.30-10.45	Coffee break
10.45-12.15	Plasma technologies II: Developments at high pressure and in liquids (<i>P. Bruggeman, Minnesota</i>)
12.30-13.30	Lunch

Program of the Master Class 2019

Advanced diagnostics

Thursday, Oct. 10: Arrival/Registration 17.00 - 21.00 (Dinner included)

All lectures have duration of ~1.15h + 15min for final extended discussion

Friday, Oct. 11:

09.00-10.30	Thomson, Rayleigh and Raman scattering <i>(A Sobota, Eindhoven)</i>
10.30-10.45	Coffee break
10.45-12.15	Second harmonic generation and four wave mixing for electric field measurements <i>(T L Chng, Paris)</i>
12.30-13.30	Lunch
13:45-15.15	LIF on reactive plasmas <i>(G Dilecce, Bari)</i>
15.15-15.30	Coffee break
15:30-17:00	Optical frequency comb absorption spectroscopy <i>(L Rutkowski, Rennes)</i>
18.30	Dinner

Saturday, Oct. 12:

09.00-10.30	QCL and enhanced absorption schemes <i>(J-P van Helden, Greifswald)</i>
10.30-10.45	Coffee break
10.45-12.15	PROES <i>(T Gans, York)</i>
12.15-12.20	Closure
12.30-13.30	Lunch