

# Program of the School 2020

## Plasma primer

to be available as video lectures one week before the school

Introduction I: Fundamentals of Plasma Physics ( <i>A. von Keudell, Bochum</i> )
Introduction II: Fundamentals of Plasma Physics ( <i>A. von Keudell, Bochum</i> )

## Modelling - Monday October 5<sup>th</sup>

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

## Sources I, Tuesday October 6<sup>th</sup>

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

## Practical day, Wednesday October 7<sup>th</sup>

9:00	Plasma modelling II: Electron kinetics in atomic and molecular plasmas ( <i>L.L. Alves, Lisbon</i> )
	Modelling Workshop: Hands on a Boltzmann solver ( <i>L.L. Alves, Lisbon</i> )

## Sources II, Thursday October 8<sup>th</sup>

9:00	Plasma sources III: High pressure thermal plasmas and sources ( <i>A. Murphy, Sydney</i> )
	Plasma sources IV: High pressure thermal plasmas and sources - Diagnostics and Applications ( <i>A. Murphy, Sydney</i> )

### **Diagnostics I, Monday October 12<sup>th</sup>**

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

### **Diagnostics II, Tuesday October 13<sup>th</sup>**

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

### **Practical day, Wednesday October 14<sup>th</sup>**

9:00	Demonstration on emission spectroscopy <i>(V. Schulz-von der Gathen, Bochum)</i>
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### **Technologies, Thursday October 15<sup>th</sup>**

10:00	Plasma technologies I: Material processing <i>(G. Henrion, Nancy)</i>
14:00	Plasma technologies II: Developments at high pressure and in liquids <i>(P. Bruggeman, Minnesota)</i>