

# Summer School of Plasma Diagnostics: PhDiaFusion 2017

## *Neutron and gamma diagnostics for fusion plasma*

11 – 15 September 2017, Podlesice, Poland

### Program

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**MONDAY, September 11, 2017**

*Arrival*

**14.00 – Lunch**

**16.00 – 18.00**

16.00 Opening of the School

16.15 Breaking News from Fusion Research     **D. Mazon**

**19.00 – Dinner**

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**TUESDAY, September, 12, 2017**

**8.00 – Breakfast**

**9.00 – 13.00**

9.00    Lecture 1     **D. Mazon**     Introductory lecture

10.00    Lecture 2     **G. Ericsson**     “Advanced neutron spectrometry instrumentation for fusion devices”

11.00 – 11.30 *Coffee break*

11.30    Lecture 3     **J. Dankowski**     “Calibration of neutron diagnostics on tokamaks: JET experience and results”

12.30    Tutorial     M. Scholz     “Neutron Activation Diagnostic for Fusion”

**13.00 – Lunch**

**14.30 – 18.40**

14.30    Lecture 4     **M. Cecconello**     “Analysis of the response function of liquid scintillators to neutron emission in fusion devices”

15.30    Tutorial     G. Ericsson

16.10    Tutorial

16.40 – 17.10 *Coffee break*

Student’s presentations

17.10    P. Raj

17.25    G. Tracz

17.40    S. Pandya

17.55    A. Wójcik-Gargula

**19.00 – Dinner**

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**WEDNESDAY, September, 13, 2017**

**8.00 – Breakfast**

**9.00 – 13.00**

9.00    Lecture 5     **P. Bednarczyk**     “Modern Gamma Ray Spectrometers for the Nuclear Structure Research”

10.00    Lecture 6     **L. Bertalot**     “ITER Neutron Diagnostics”

11.00 – 11.30 *Coffee break*  
11.30 Lecture 7 **G. Kasprowicz** *"Multichannel Data Acquisition System for SXR diagnostics"*  
12.30 Lecture 8 **W. Zabołotny** *"FPGA and Embedded Systems based fast Data Acquisition and Processing for SXR diagnostics"*

**13.00** – *Lunch*

*Excursion*

**19.00** – *Dinner*

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**THURSDAY, September, 14, 2017**

**8.00** – *Breakfast*

**9.00 – 13.00**

9.00 Lecture 9 **P. Kubeš** *"Experimental research of neutron and HXR emission from the dense plasma focus"*

10.00 Lecture 10 **M. Rubel** *"Neutrons - benefits and disadvantages. Materials under neutron irradiation"*

11.00 – 11.30 *Coffee break*

11.30 Lecture 11 **J. Bielecki** *"Fusion Neutron Diagnostics for Tokamak Plasma - from a plasma diagnostician perspective"*

12.30 Tutorial J. Bielecki

**13.00** – *Lunch*

**14.30 – 18.25**

14.30 Tutorial **M. Rubel**

15.30 Tutorial

16.40 – 17.10 *Coffee break*

Student's presentations

17.10 Ł. Marciniak

17.25 V. Munzar

17.40 K. Król

17.55 A. Kurowski

18.10 R. Kwiatkowski

**19.00** – *PhDiaFusion 2017 Summer School Barbecue party*

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**FRIDAY, September, 15, 2017**

**8.00** – *Breakfast*

**9.00 – 13.00**

9.00 Lecture 12 **U. Woźnicka** *"Fission neutrons for fusion diagnostics"*

10.00 Lecture 13 **W. Królas** *"The DONES Fusion Neutron Source"*

11.00 – 11.30 *Coffee break*

11.30 Lecture 14 **U. Wiącek** *"STUMM – a module dedicated for monitoring neutron and gamma radiation fields generated in IFMIF-DONES"*

**12.30** Closing of the School

**13.00** – *Lunch*

*Departure*

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