



DEDNAED

DeDNAed: Advancing Raman Spectroscopy with DNA Origami

AGENDA



29 Aug 2023



09:00 - 13:30 CEST



FH Aachen @ Room: WU10

09:00 **Opening and Welcome**

KEYNOTE LECTURES

09:15 **Templating functional ligands on DNA nanostructures for probing biological systems**

David Smith, Fraunhofer - IZI

09:45 **DNA origami as a tool for precise positioning of sensing elements towards quantitative SERS measurements**

- Andreas Heerwig, Kurt-Schwabe-Institut Meinsberg

10:15 **Surface modifications for selective immobilization of DNA origami-based biosensors**

- Julia Hann, TU Chemnitz

10:45 **Nanofluidic devices for the analysis of single biomolecules**

Irene Fernandez-Cuesta, Universität Hamburg

11:15 **BREAK – EBS PHOTO SESSION**

11:45 **Biorecognition elements and their coupling to DeDNAed**

Saloni Agarwal, Universität Potsdam

12:15 **Basics and applications of SERS spectroscopy for sensing purposes**

Pietro Galinetto, Universität Pavia

12:45 **Detection, identification and structural investigation of biomolecules by surface enhanced Raman spectroscopy**

- Marc Lamy de la Chapelle, Universität Le Mans

13:15 **Q&A - DeDNAed**

About DeDNAed:

The project intends to develop a novel, innovative biosensing platform whose advantages and benefits are in terms of sensitivity, versatility and being ultrafast by an optical approach.

Our platform will be based on the assembly and integration of sensing elements (transducer and bioreceptor) by DNA origami. The DNA origami will serve as a “nano-breadboard” in order to precisely control the position of these elements and thus the sensor architecture at the nanometer scale.

Travel info: <https://shorturl.at/bcjDJ> - **Join us online via MS Teams:** <https://shorturl.at/wzBHJ>



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