Near-field Optical Nanoscopy Summer School San Sebastian, June 6 – 9, 2023















San Sebastian, June 6 – 9, 2023

# Program

## Tuesday | June 6th, 2023

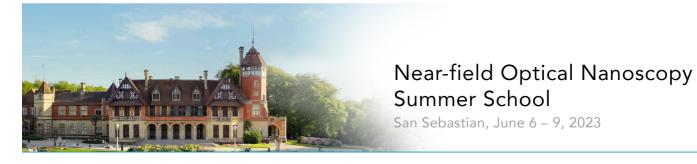
09:00 - 09:30	Registration & coffee
09:30 – 10:00	Rainer Hillenbrand – CIC nanoGUNE BRTA, San Sebastián, Spain Monika Goikoetxea – CIC nanoGUNE BRTA, San Sebastián, Spain Dorota Pawlak – Ensemble3, Warsaw, Poland Opening Remarks
10:00 - 11:00	<b>Lukas Eng</b> – IAP, TU Dresden, Germany Introduction to Atomic Force Microscopy (AFM)
11:00 - 11:30	Coffee Break
11:30 - 13:00	Fritz Keilmann – LMU, Munich, Germany Rainer Hillenbrand – CIC nanoGUNE BRTA, San Sebastián, Spain Introduction to scattering-type Scanning Near-Field Optical Microscopy (s- SNOM)
13:00 – 14:30	Cocktail lunch at Palacio Miramar
14:30 - 15:30	<b>Martin Schnell</b> – CIC nanoGUNE BRTA, San Sebastián, Spain Pseudo-heterodyne (PsHet) interferometric detection in s-SNOM
15:30 - 16:30	<b>Rainer Hillenbrand</b> — CIC nanoGUNE BRTA, San Sebastián, Spain Near-Field Probing Phenomena — Part I
16:30 - 17:00	Coffee break
17:00 – 17:15	<b>Yasin Durmaz</b> – neaspec, attocube systems AG, Haar, Germany <i>PsHet interferometric Point Spectroscopy with s-SNOM</i>
17:15 – 17:45	Lars Mester – neaspec, attocube systems AG, Haar, Germany AFM and s-SNOM Data Processing using Gwyddion
Evening Program	
20:00	Dinner at a traditional Basque Cider house Meeting point: to be announced



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# Wednesday | June 7th, 2023

08:30-09:00	Coffee
09:00 - 10:30	<b>Raul Freitas</b> – Brazilian Synchrotron Light Laboratory, Campinas, Brazil <i>nano-FTIR Spectroscopy</i>
10:30-11:00	<b>Tobias Gokus</b> – neaspec, attocube systems AG, Haar, Germany <i>nano-FTIR Data Processing</i>
11:00 - 11:30	Coffee Break
11:30- 12:00	<b>Alexander Govyadinov</b> – neaspec, attocube systems AG, Germany Modeling of Near-field Optical Contrast and Spectra
12:00-13:00	Lars Mester – neaspec, attocube systems AG, Haar, Germany Material Contrasts in s-SNOM and nano-FTIR – Part I
13.00 - 15:00	Lunch & Coffee at Palacio Miramar
15:00 - 16:00	Thomas Taubner – RWTH Aachen, Germany Material Contrasts in s-SNOM and nano-FTIR – Part II
16:00 - 17:00	Iris Niehues – CIC nanoGUNE BRTA, San Sebastián, Spain Near-Field Probing Phenomena – Part II
17:00 - 19:00	Poster Session I - with Beer & Wine & Cider + Pintxos



# Thursday | June 8th, 2023

08:30-09:00	Coffee
09:00 - 10:00	<b>Lukas Eng</b> – IAP, TU Dresden, Germany Advanced AFM Modes
10:00 - 11:00	Antonio Ambrosio – Center for Nano Science and Technology of IIT, Milan, Italy Photoinduced Forces and Photothermal Expansion – Part I
11:00 - 11:30	Coffee Break
11:30 - 12:15	<b>Claas Reckmeier</b> – neaspec, attocube systems AG, Haar, Germany Photoinduced Forces and Photothermal Expansion – Part II
12:15 – 15:00	Lunch (free time to discover the city)
15:00 - 16:00	Adrian Cernescu – neaspec, attocube systems AG, Haar, Germany Practical Aspects using neaSCOPE Instruments
16:00 - 18:00	Poster Session II - with Coffee and sweets
18:00 - 18:15	<b>Rainer Hillenbrand</b> – CIC nanoGUNE BRTA, San Sebastián, Spain <i>Closing Remarks</i>



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#### Friday | June 9th, 2023 Focus Sessions

08:30-09:00	Coffee
09:00 - 10:00	<b>Pablo Alonso-González</b> – University of Oviedo, Spain <i>Plasmon and Phonon Polariton mapping in 2D Materials</i>
10:00 - 10:45	<b>Frank Koppens</b> – ICFO, Castelldefels, Spain Near-field Photocurrent mapping
10:45 –11:15	Coffee break
11:15 – 12:15	<b>Dmitri Basov</b> – Columbia University, New York, USA <i>Ultrafast Pump-Probe Nanoscopy</i>
12:15 – 13:00	<b>Vladimir Zenin</b> – University of Southern Denmark, Odense, Denmark Near-field Imaging of Plasmonic and Dielectric Antennas and Waveguides
13:00 - 14:30	End



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## Summer School Venue:

Miramar Palace Paseo de Miraconcha 48 20007 San Sebastián (Spain)