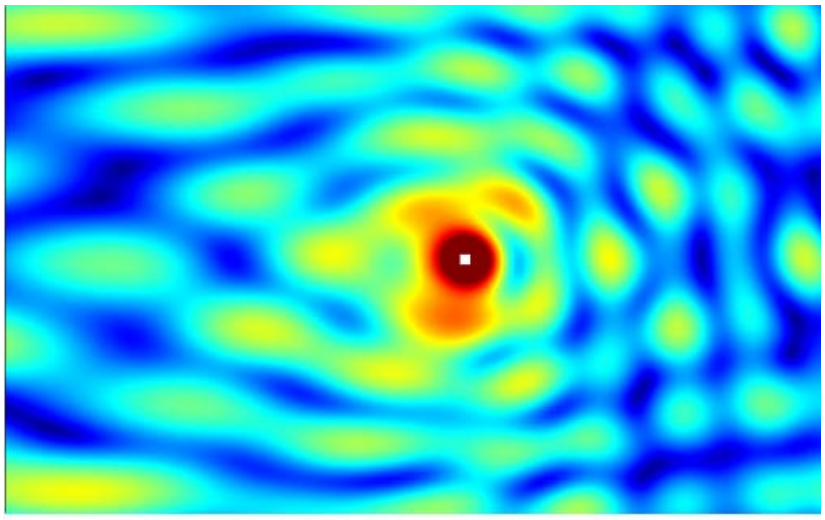
Bremen Workshop on Light Scattering 2026



16. + 17. March 2026

Leibniz Institute for Materials Engineering IWT
Bremen, Germany

IWT
Leibniz-Institut für Werkstofforientierte Technologien

Leibniz Association

Programme

	Monday, 16. March 2026
8:45 - 9:00	***Opening***
9:00 - 9:30	Jonas Gienger, Biomedical Optics, Physikalisch-Technische Bundesanstalt (PTB), Berlin; Germany *On the interference of the scattered and incident waves in Gaussian beam scattering problems*
9:30 - 10:00	Jan David Fischbach: Institut für Nanotechnologie (INT), KTI, Karlsruhe, Germany *Resonant states reveal strong light-matter coupling in nanophotonic cavities*
10:00 - 10:30	Elias Herzog: Institut für Nanotechnologie (INT), KTI, Karlsruhe, Germany *Speedup of Multiple Scattering Problems by Singular Value Decomposition of T-matrices*
10:30 - 11:00	***Coffee break***
11:00 - 11:30	Parmenion Mavrikakis: Nanophotonics and Metrology Laboratory (NAM), EPFL, Lausanne, Suisse *HELIOS: Light scattering in homogeneous, periodic, and stratified systems with a surface integral approach*
11:30 - 12:00	Olga Kochanowska, Institute of Geophysics, University of Warsaw, Poland *Tunable hyperbolic metasurfaces for switchable Purcell factor enhancement*
12:00 - 13:30	***Lunch break***
13:30 - 14:00	Paul Bouillon: CORIA, Le Havre, France *Convergence of the weighted discretization in the ADDA code*
14:00 - 14:30	Clément Argentin, CORIA, Rouen, France *How fast is DDA? A reproducible cross-code benchmark*
14:30 - 15:00	Maxim Yurkin, CORIA, Rouen, France *Simulations of plasmonic cubes with the discrete dipole approximation: From success to failure and back*
15:00 - 15:30	***Coffee break***
15:30 - 16:00	Ivan Lopushenko, Biophotonics, University of Oulu, Finland *Investigating the relationship between Mie scattering amplitudes and probability amplitudes for quantum light state*
16:00 - 16:30	Muluneh G. Abebe, Micro- and Nanophotonic Materials Group, University of Mons, Mons, Belgium *Nanophotonic scintillators for improved X-ray imaging*
16:30 - 17:00	Sihvola Ari, Aalto University, School of Electrical Engineering, Aalto, Finland *Symmetry properties of the extinction cross section of non-symmetric scattering particles*

	Thuesday, 17. March 2026
9:00 - 9:30	Alfred Weber, Institut für Mechanische Verfahrenstechnik, Technische Universität Clausthal, Clausthal-Zellerfeld, Germany *Single Particle Extinction and Scattering approach to characterizing nanoparticle-hetero-aggregates produced by spray synthesis*
9:30 - 10:00	Petr Koutenský, Univerzita Karlova, Matematicko-fyzikální fakulta, Praha, Česká republika *Imaging the transverse component of optical near-fields of nanostructures using ultrafast 4DSTEM*
10:00 - 10:30	Fangcheng Huang, Department of Electronic Engineering and Integrated Mechanical Engineering, Anqing Normal University, Anhui, China *A Fast Method for Calculating Scattering Coefficients of Multiple Spheres*
10:30 - 11:00	***Coffee break***
11:00 - 11:30	Fatih Dikmen, *Gebze Technical University, Electronics engineering Department, Turkey* *Closed-Form Green's Function Based T-Matrix Formulation of Cylindrical Scattering in 2D Layered Media and Its Extension to 1D Periodic Gratings*
11:30 - 12:00	Mirza Karamehmedović, Department of Applied Mathematics and Computer Science, Technical University of Denmark, Lyngby, Denmark *On the Mechanism of Photonic Nanojet Formation and Control*
12:00 - 12:30	Sadeq Bahmani, Leibniz Universität Hannover, Hannover, Germany *Near-field optimization for multipole and scattering applications*
12:30 - 14:00	***Lunch break, End of the Workshop***

Web page of the workshop including hotel and travel information

http://www.ScattPort.org

Talks
Duration of talks: 20 mins + 10 mins discussion.

Presentations
A beamer with notebook will be available.
Please bring your Power Point presentation on USB stick for easy transfer of presentations.

Preregistration meeting
To go sight-seeing around the city if the weather is fine or just to have some beer at the Schlachte Embankment we arranged a meeting on the evening of Sunday 15.3.2026 at 19.00h. The meeting place will be the Roland statue on the Marktplatz (no. 6 on map) near the Rathaus at 19.00h.
After the city walk we will go to this pub nearby: Schüttinger Gasthausbrauerei, Hinter dem Schütting 12/13, http://www.schuettinger.de/

Travel information
Tram Line 6 connects the Campus to the city, the central railway station and the airport.
From the central railway station, the ride to the campus is about 15 minutes.
There is a tram every 5 - 10 mins. Please use tram line 6 direction **Universität.**
Please step off at the last but one tram stop **Universität Zentralbereich.**
You may buy tickets (each € 3,00) at a ticket vending machine at the tram stop, or a machine inside the tram, please have coins available.

Fee There will be no fee.
Registration We still have some space at the workshop. If you like to register, send an email to Thomas Wriedt thw@iwt.uni-bremen.de.

Map of the campus

Venue
Room 1250

Leibniz Institute for Materials Engineering IWT
(Leibniz-Institut für Werkstofforientierte Technologien - IWT)
Badgasteiner Str. 3
28259 Bremen
Germany

We will post signs such that you will find your way.

Organizing Committee
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