



13th International Conference Series on

Laser-light and Interactions with Particles
Optical Particle Characterization follow-up !

August 21-26th, 2022, Warsaw, Poland



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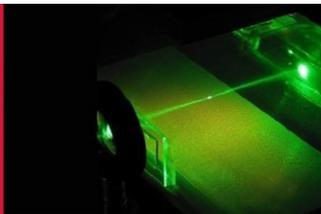
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LIP 2022

Optical Particle Characterization follow-up!

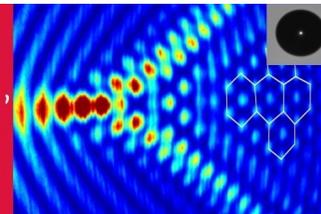
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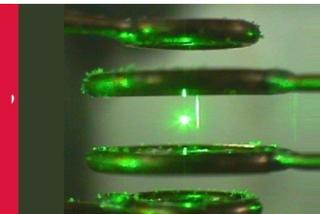
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Presentations

All in-person and remote presentations will be displayed and recorded via the video conferencing platform: Zoom (upon invitation by the organizing committee). With the agreement of the authors, the videos will be pushed on the conference website as well as a dedicated YouTube Channel.



Venue and accommodation

The conference venue is the [Institute of Physics](#), Polish Academy of Sciences (IP-PAS). It is located in the south part of Warsaw in Mokotów district, within 15 minutes by car or bus from "Chopin Airport" and 20 min by tram or bus from the city centre.

Registration

Conference fees in euros (inclusive of all taxes) for in-person and remote participations:

The registrations fees include: ⁽¹⁾ the Conference attendance, book of the conference abstracts, lunches and coffee breaks mentioned in the program, LIP 2022 excursion, welcome reception, social dinner, guided tour; ⁽²⁾ LIP 2022 excursion, lunches mentioned in the program, welcome reception, social dinner, guided tour; ⁽³⁾ participation to guest travel, video conferencing licensing and editing.

	Early	Late
In person, student (Master, PhD) ⁽¹⁾	400	475
In-person, academic/Industry ⁽¹⁾	500	575
In person, accompanying person ⁽²⁾	220	220
Remote, all categories and dates ⁽³⁾	50	

Important dates

Abstract submission opensNovember 3rd, 2021
Abstract submission ends.....March 25th, 2022
Notification of abstract acceptance.....April 25th, 2022

Conference conveners

Daniel Jakubczyk (co-chair), IF PAN, Warsaw, Poland.
Maciej Kolwas (co-chair), IF PAN Warsaw, Poland.
Fabrice Onofri, IUSTI, CNRS, Marseille, France.
G rard Gouesbet, CORIA, INSA de Rouen, France.

Secretariat and web site of the conference:

Dr. Anastasiya Derkachova & Dr. Mariusz Wozniak
Institute of Physics, Polish Academy of Sciences (IP-PAS)
Group of Optical Characterization of Micro- and Nanoobjects
Al. Lotnikow 32/46
02-668 Warsaw, Poland
Tel.: (+48) 22 116-32-77 / Mobile: (+48) 693-087-455

Email for the conference: contact@lip-conference.org

Web site of the conference: www.lip-conference.org

Host institution, sponsors & partners:



Announcement
Hybrid edition

13th International Conference Series on "Laser-light and Interactions with Particles"



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Warsaw, Poland

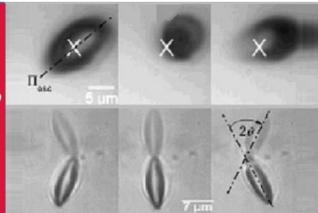
www.lip-conference.org





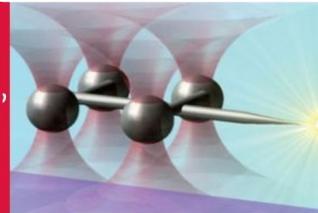
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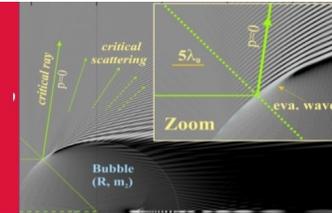
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Background and Scope

For more than three decades this conference series has promoted state-of-the-art research and scientific exchange on laser-beams and interactions with particles and particle systems. The present edition follows the former Optical Particle Sizing (OPS) and Characterization (OPC) conferences held in Rouen 1987; Tempe, 1990; Yokohama, 1993; Nürnberg, 1995; Minneapolis, 1998; Brighton, 2001; Kyoto, 2004; Graz, 2007 as well as the reformulated Laser-light and Particle Interactions (LIP) conference held in Rouen in 2012; Marseille, 2014; Xi'an, 2016; College Station (TX), 2018. The 13th LIP conference has been rescheduled to 2022 due to the COVID-19 pandemic.

Papers, ranging from **theory to practice**, are invited with particular emphasis being placed on the following topics:

- Optical particle characterization methods (interferometric, holographic, polarimetric, spectral, static, dynamic,...)
- Near-field, far-field and time-resolved scattering, plasmonics and other resonances,
- Complex shaped particles and aggregates,
- Multiple scattering and random media (dense, turbulent,...)
- Mechanical effects of light (particle manipulation, force measurement, optical tweezer,...)
- Laser beams description (contributions acoustical and quantum beams are also welcomed)...

Fields of **application** may range from multiphase flow characterization, to plasma and soft matter physics, nanosciences, aerosol science and atmospheric environment, biomedical optical engineering, etc.



Committees

SCIENTIFIC

W. Bachalo, Artium technologies Inc, USA
X.S. Cai, Univ. Sci. and Technol., Shanghai, China
Y.P. Han, School of Science, Xidian University, Xidian, China
G. Gouesbet, CORIA, Nat. Inst. Appl. Sci., Rouen, France
G. Gréhan, CORIA, Nat. Center Sci. Rsrch (CNRS), Rouen, France
J.A. Lock, Cleveland State University, Cleveland, USA
O. Maragò, IPCF, National Research Council, Messina, Italy
P. L. Marston, Washington State University, Pullman, USA
F.R.A. Onofri, IUSTI, Nat. Center Sci. Rsrch (CNRS), Marseille, France
C.M. Sorensen, Kansas State University, Manhattan, KS, USA
B. Stout, Fresnel Institute, Aix-Marseille Univ., Marseille, France
C. Tropea, SLA, Tech. Univ. of Darmstadt, Darmstadt, Germany
G. Videen, Army Research Laboratory, Adelphi, USA
T. Wriedt, ITW, University of Bremen, Germany
Z.S. Wu, School of Science, Xidian University, Xidian, China
P. Yang, Dept. Atmos. Sci, Texas A&M Univ., College Station, TX, USA

ADVISORY

Y. Aizu, Murooran Institute of Technology, Murooran, Japan
L. A. Ambrosio, University of Sao Paulo, USP, Brazil
M. Brunel, CORIA, University of Rouen, Rouen, France
R. Chakrabarty, Research Institute, Reno, USA
L. Tsang, Dept. Electr. Eng. and Computer Sci., University of Michigan, MI, USA
Y.E. Geints, Russian Academy of Sciences, Tomsk, Russia
D. Grier, New-York University, New-York, USA
S. Hanna, University of Bristol, Bristol, UK
M. Kolwas, IP, Polish Academy of Sciences, Warsaw, Poland
F. Lemoine, LEMTA, University of Lorraine, Nancy, France
F. G. Mitri, Los Alamos National Laboratory, Los Alamos, NM, USA
A.A.R. Neves, National Research Council, Lecce, Italy
T. Nieminen, University of Queensland, Brisbane, Australia
B. Pouligny, CRPP, Nat. Center Sci. Rsrch (CNRS), Pessac, France
H.-H. Qiu, Hong Kong Univ. Sci. & Technol., Kowloon, Hong Kong
K.F. Ren, CORIA, University of Rouen, Rouen, France
N. Roth, ITW, Stuttgart University, Stuttgart, Germany
M. Šiler, Inst. Scientific Instruments, ASCR, Brno, Czech Republic
A. M. K. P. Taylor, Imperial College, London, UK
X.M. Sun, School of Electric. and Electron. Eng., Shandong Univ. Technol., Zibo, China
M.R. Vetrano, Department of Mechanical Engineering, KU Leuven, Leuven, Belgium
J. J. Wang, School of Science, Xidian University, Xi'an, China
S. Will, Friedrich-Alexander-Universität, Erlangen-Nürnberg, LTT, Erlangen, Germany
Y. Wu, State Key Laboratory of Clean Energy Utilization, Zhejiang University, China
F. Xu, University of Oklahoma National Weather Center, Norman, OK, USA
R. Xu, Micromeritics Instrument Corp., Shanghai, China
M. Yurkin, Voevodsky Inst. of Chem. Kinetics and Comb., Novosibirsk, Russia



LOCAL

Gennadiy Derkachov, IF PAN, Warsaw, Poland
Anastasiya Derkachova (*conf. secretary*), IF PAS, Warsaw, Poland
Krystyna Kolwas, IF PAN, Warsaw, Poland
Sławomir Palesa, IF PAN, Warsaw, Poland
Yaroslav Shopa, IF PAN, Warsaw, Poland
Mariusz Woźniak (*conf. secretary*), IF PAN, Warsaw, Poland
Daniel Jakubczyk (*Co-chair*), IF PAN, Warsaw, Poland
Maciej Kolwas (*Co-chair*), IF PAN, Warsaw, Poland
Gérard Gouesbet, CORIA, Nat. Inst. Appl. Sci., Rouen, France
Fabrice Onofri, IUSTI, Nat. Center Sci. Rsrch (CNRS), Marseille, France

Keynotes Lectures

Leonardo A. Ambrosio—University of São Paulo, Brazil—“Structured fields constructed from superpositions of nondiffracting beams”
Edouard Berrocal—Lund University, Sweden — “High-contrast imaging through optically dense sprays using Structured Illumination and two-photon excitation Fluorescence imaging.”
David. G. Grier—New-York University, USA—“Holographic Particle Characterization: Unveiling the Composition and Dynamics of Colloidal Dispersions with Holographic Video Microscopy”
Monika Ritsch-Marte—Medical University of Innsbruck, Austria—“Tailored optical and acoustic traps for organoid research”
Maciej Wojtkowski—Nicolaus Copernicus University & PAN Poland—“In vivo imaging by Spatio-Temporal Optical Coherence techniques”

Instructions to authors

Abstracts, presentations & proceedings

Three formats are planned for presentations: keynote lectures, oral presentations and posters. For the two latter, papers are invited on the topics outlined and others falling within the scope of the conference. To do so, authors are invited to submit an extended abstract via the conference web site. Selection will be based on two independent reviews. All selected abstracts will be published in the proceedings (with ISBN).

Special issue

A special issue LIP2022 is also scheduled in the Journal of Quantitative Spectroscopy & Radiative Transfer ([IOSRT](#)). Guest editors : G. Gouesbet, F. Onofri, M. Kolwas & D. Jakubczyk)

