

10th Annual Chautauqua on Nonlinear Optics

Location: Rawls Hall, Rm 2058
Purdue University
100 S Grant Street
West Lafayette, IN, 47907

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Program Introduction

This week-long intensive, interactive annual summer short course program on nonlinear optical and multi-photon phenomena is designed to engage participants in nuts-and-bolts discussions on issues related to measurements and analysis. This year's focus subject will target applications of non-linear optics microscopy, surface SHG and SFG. The program is designed to target participants with approximately 1-2 years of hands-on experience in nonlinear optics.



Website: www.chem.purdue.edu/chautauqua

Keynote Speaker



Sylvie Roke

Julia Jacobi chair in photomedicine

Laboratory for fundamental BioPhotonics (LBP), École Polytechnique Fédérale de Lausanne (EPFL)
Institute of Bio-engineering (IBI), School of Engineering (STI), CH-1015 Lausanne, Switzerland

Biography

- 2011 – present: Julia Jacobi Chair in photomedicine, École Polytechnique Fédérale Lausanne, CH.
- 2005 – 2012: Max Planck Research Group Leader (W2 /C3) of a centrally announced open theme independent research group. Host: The Max-Planck Institute for Metals Research, Stuttgart, DE.
- 2005 – 2005: Alexander von Humboldt Fellow, dept. of Applied Physical Chemistry, Heidelberg University, DE.
- 2004 – 2005: Postdoctoral Fellow, FOM-Institute for Plasma Physics, NL.

Education

- PhD , Natural Sciences, Leiden University, 2000-2004 (highest honors)
- M.Sc. , Physics, Utrecht University, 1997 - 2000 (highest honors)
- M. Sc., Chemistry, Utrecht University, 1995 - 2000 (highest honors)

Schedule of Events:

Monday, June 15:

- 8:30 – Coffee, Bagels, Introductions in RAWL 2058. Assign Working Groups.
- 9:00 – The Molecular Tensor - Garth Simpson
- 10:00 – Problem Set Questions

- 12:00 – AlazarTech Lunch

- 2:00 – Participant Presentations
- 3:00 – Coordinate transformations - Garth Simpson
- 4:00 – Problem Set Questions

Tuesday, June 16:

- 8:30 – Review Problem Set Questions.
- 9:00 – Keynote Speaker Lecture – Sylvie Roke
- 10:00 – Problem Set Questions

- 12:00 – Lunch

- 2:00 – Participant Presentations
- 3:00 – Keynote Speaker Lecture – Sylvie Roke
- 4:00 – Problem Set Questions

Wednesday, June 17:

- 8:30 – Review Problem Set Questions.
- 9:00 – NLO Character Table, and Tensor Visualization – Garth Simpson
- 10:00 – Problem Set Questions

- 12:00 – Altos Photonics Lunch

- 2:00 – Participant Presentations
- 3:00 – Dimers, Aggregates, and Proteins – Garth Simpson
- 4:00 – Problem Set Questions

Thursday, June 18:

- 8:30 – Review Problem Set Questions.
- 9:00 – Fresnel Factors, and Experimental Design – Garth Simpson
- 10:00 – Problem Set Questions

- 12:00 – Lunch

- 2:00 – Participant Presentations
- 3:00 – Invited Speaker Lecture – Alexei Lagutchev

4:00 – Problem Set Questions

Friday, June 19:

9:00 – Review Problem Set Questions.

9:30 – Chirality, 4WM, NLO Microscopy – Garth Simpson

10:30 – Simpson Lab Tour and Demo

12:00 – Pizza, Refreshments, Homebrew, and Reminiscing of Fond Chautauqua Memories
(to Be Held at the Simpson Family Residence: 108 Tecumseh Park Place, West
Lafayette, 765-497-3370).

3:00 – Program Concludes.

Sponsors:



Participants

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