

Join us for a FREE Webinar

# **Ray Optics Simulations**

Thursday, June 4, 2020 2:00 PM - 3:00 PM EDT

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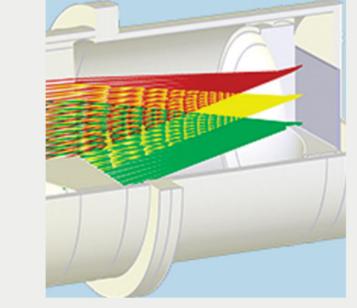
Presented by



## **About This Webinar**

Tune into this webinar to learn about optical ray tracing using the COMSOL Multiphysics® software.

This presentation will include a live demo in the software, showing how to create a fully parameterized geometry of a typical lens system; trace rays through the system; and postprocess the results. The webinar will also discuss more specialized ray features, such as the analysis of ray intensity and polarization. Presenter Chris Boucher will explain how the Ray Optics Module, an add-on product to COMSOL Multiphysics<sup>®</sup>, can be combined with structural and thermal simulation for highly accurate structural-thermal-optical performance (STOP) analysis. Attendees can ask questions throughout the webinar or at the end during the Q&A session.



#### Who should attend: Engineers and researchers who:

- Design or use devices such as laser focusing systems, spectrometers, cameras, and telescopes.
- Manipulate light with prisms, lenses, beamsplitters, or gratings. Design devices to redirect and focus solar radiation.
- Must consider thermal or structural phenomena and their effects
- on optical performance.

### Attendees will learn:

- How to set up a fully parameterized system of lenses using the geometry tools in COMSOL Multiphysics®. How to trace rays through a lens system using the Ray Optics
- Module. How to store information about intensity, polarization, phase,
- number of reflections, and optical path length along rays as part of a simulation. How COMSOL Multiphysics<sup>®</sup> facilitates coupled STOP analysis.
- How to use built-in evaluation tools to analyze and report simulation results.

#### About the presenter: Chris Boucher is the technical product manager for the COMSOL

Particle Tracing Module and Ray Optics Module. He received his B.S. in aerospace engineering and physics from Worcester Polytechnic Institute (WPI) before joining COMSOL in 2012.

#### About COMSOL: COMSOL is a global provider of software solutions for multiphysics

modeling. Its COMSOL Multiphysics® product is an integrated software environment for creating physics-based models and simulation apps. Add-on products expand the simulation platform for electrical, mechanical, fluid flow, and chemical applications. Interfacing tools enable the integration of COMSOL Multiphysics® simulations with all major technical computing and CAD tools on the CAE market. Simulation experts rely on the COMSOL Server™ product to deploy apps to their design teams, manufacturing departments, test laboratories, and customers throughout the world.

Note that COMSOL will follow up with all registrants about this event and any related questions. **Mark Your Calendar** 

Please see www.comsol.com/privacy for COMSOL's Privacy Policy. Contact COMSOL at www.comsol.com/contact for more information.

### Date: Thursday, June 4, 2020

Time: 2:00 PM - 3:00 PM EDT Space is limited. Reserve your Webinar seat now at: https://attendee.gotowebinar.com/register/5056365210072947211

After registering you will receive a confirmation email containing information about joining the Webinar.

SYSTEM REQUIREMENTS

#### PC-based attendees Required: Windows® 10, 8, 7, Vista, XP or 2003 Server

### Mac® -based attendees

Required: Mac OS® X 10.6 or newer

#### Mobile attendees Required: iPhone®, iPad®, Android<sup>TM</sup> phone or tablet, Windows 8 or Windows Phone 8

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- A New Approach to Interferometry: Unlocking New Possibilities in UV/VIS Spectroscopy, 6/17/2020 10:00:00 AM EDT
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