



WEBINARS

Join us for a **FREE Webinar**

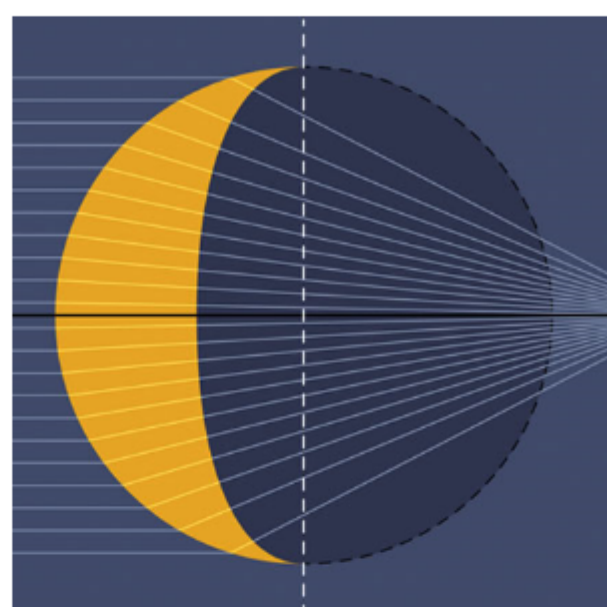
Stigmatic Optical Imaging: The Past, Present, and Future

Tuesday, August 22, 2023 1:00 PM - 2:00 PM EDT

[Register Now](#)

.: About This Webinar

The exact equation to design a stigmatic lens has recently been discovered and extensively studied. This equation allows researchers to explore several stigmatic optical systems and shows that these systems share several properties. In this presentation, Rafael González-Acuña of Huawei Technologies reviews those properties, starting from the history of the problem in ancient Greece to its solution that was published in 2018. He reviews that solution step by step and explores the mathematical details. The derivation does not need paraxial approximations, numerical approaches, or optimization, because it is singularly based on Fermat's principle. It is a close-form analytical equation. González-Acuña focuses on the properties of the equation, such as mention continuity, homeomorphism, limitations, stability, and most importantly the uniqueness theorem of stigmatism. He shares about the generalization of the equation to systems with an arbitrary number of lenses, mirrors, and both on-axis and off-axis freeform systems or aplanatic systems. Finally, he touches on the implications of the solution in the general equation adaptive mirror and comments on future research around this equation.



Who should attend:

Optical engineers and all those working with optics who are interested in gaining further understanding of stigmatic optical imaging. Engineers, researchers, and R&D scientists who work with or design optical imaging tools and stigmatic lenses. Those who work with cameras, imaging, machine vision, microscopy, astronomy, or metrology. Professionals who purchase lenses and optical components.

About the presenter:

Rafael G. González-Acuña, Ph.D. is a lens designer for Huawei Technologies. He earned both a bachelor's degree in physics from the Tecnológico de Monterrey and a bachelor's degree in mathematics from Universidad Abierta y a Distancia de México. He earned his master's degree in optomechanics at Centro de Investigaciones en Óptica, A.C. and his doctorate in optics from Tecnológico de Monterrey. His doctoral thesis focused on the design of free spherical aberration lenses. González-Acuña is a co-author of the solution to designing bi-aspheric singlet lenses free of spherical aberration. He has won several international awards and scholarships and has co-authored 35 papers on lens design, as the first and corresponding author.

.: Mark Your Calendar

Date: Tuesday, August 22, 2023

Time: 1:00 PM - 2:00 PM EDT

Space is limited. Reserve your Webinar seat now at: <https://attendee.gotowebinar.com/register/5009529340315329887?source=eblast>

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

SYSTEM REQUIREMENTS

Operating System

Windows[®] 7 or later, Mac OS[®] X 10.9 or later, Linux[®], Google Chrome[™] OS
Android[™] OS 5 or later, iOS[®] 10 or later

Web Browser

Google Chrome[™] (most recent 2 versions)
Mozilla Firefox[®] (most recent 2 versions)

Mobile Devices

Android[™] 5 or later
iPhone[®] 4S or later
iPad[®] 2 or later
Windows Phone[®] 8+, Windows[®] 8RT+

.: More from Photonics Media

Upcoming Webinars

- [Advanced Packaging for Integrated Photonics: From Research to Manufacturing](#), 8/29/2023 10:00:00 AM EDT
- [Infrared Optics Summit](#), 9/20/2023 10:00:00 AM EDT
- [Precision Automation Principles for the Optimal Testing and Packaging of PIC Devices](#), 9/21/2023 1:00:00 PM EDT

Archived Webinars

- [Nanoscale Imaging Techniques](#)
- [How Lighting Innovations Drive Manufacturing Advancements](#)
- [Motorized and Calibrated Lenses for Machine Vision Applications](#)

Don't miss out!

Sign up for our Webinar Alerts email today and never miss an upcoming event.

We respect your time and privacy. You are receiving this email because you are a Photonics Spectra magazine subscriber. You may use the links below to manage your subscriptions or contact us.

Questions: info@photonics.com

[Unsubscribe](#) | [Subscribe](#) | [Subscriptions](#) | [Privacy Policy](#) | [Terms and Conditions of Use](#)

Photonics Media, 100 West St., PO Box 4949, Pittsfield, MA 01202-4949
© 1996 - 2023 Laurin Publishing. All rights reserved. Photonics 4949 is Registered with the U.S. Patent & Trademark Office. Reproduction in whole or in part without permission is prohibited.