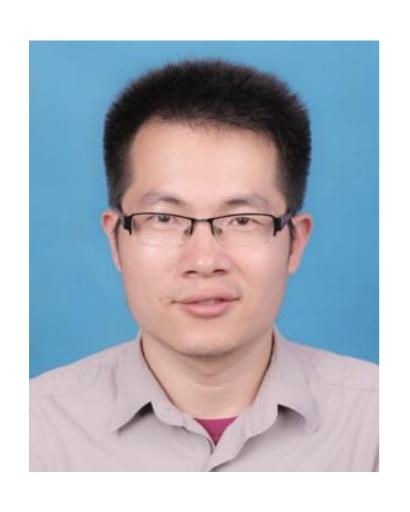


應用科學研究中心 Research Center for Applied Sciences



Huanyang Chen (陈焕阳) College of Electronics Science and Technology, Xiamen University, China

Conjugate metamaterials

Date: 2017.05.10 (Wed)

Time: 11:00-12:00

Venue: B106 Auditorium, 1F, IRBST,

Academia Sinica

跨領域科技研究大樓 1F B106 演講廳

Host: Din Ping Tsai 蔡定平老師

Contact: Kelly Tsai Email: kellytsai@gate.sinica.edu.tw Tel: 02-2787-3105

Conjugate metamaterials

Huanyang Chen
College of Electronics Science and Technology, Xiamen University, China
*Email: kenyon@xmu.edu.cn

Abstract:

In this talk, we will show how transformation optics makes it possible to design conjugate metamaterials. We will show that these materials can also serve as substrates for making a subwavelength-resolution lens. The so-called "perfect lens" can be regarded as a limiting case. In addition, we will search for stable lossless surface polaritons at the interfaces between a loss and a gain medium beyond the compensated surface plasmon polariton picture and the parity-time symmetry limit. We will unveil a general picture of "relationship circles" as the conditions for lossless surface polaritons.

Bio: Huanyang Chen received the B.Sc. and Ph.D. degrees in physics from Shanghai Jiao Tong University, Shanghai, China, in 2005 and 2008 respectively. From 2006 to 2009, he was a Research Assistant and a Postdoctoral Fellow in the Hong Kong University of Science and Technology, Hong Kong. From 2009 to 2016, he was a Professor in Soochow University, Suzhou, China. He is currently a Professor in Xiamen University, China. His research interests include photonic/phononic crystals, metamaterial designs, and transformation optics/acoustics. He has authored or coauthored more than 90 papers, including review articles for Nature Photonics, Nature Materials, and Nature Review Materials. His papers have been cited for more than 5000 times, and he has an H-index of 30. His work on transformation acoustics and acoustic cloaking has been selected by IOP as "the best of 2008".

Photo:

