**Condensed Matter Physics Seminar Department of Physics, National Taiwan University** 

Physics and applications of index-antiguided waveguide lasers



## Time 10:00-12:00

R304LocationDept. of Physics / Center for Condensed Matter<br/>National Taiwan University

## All Are Welcome!



**Dr. Tsinghua Her** 

## Abstract

Index-antiguided optical waveguides, with refractive index of the core made purposely lower than that of the cladding, represent a simple class of open waveguides. Combined with high gain, antiguided waveguides possess many intriguing and un-conventional optical properties. In this talk, I will review the physics of open planar waveguides, with an emphasis on its gain-guided and index-antiguided nature and modal non-orthogonality. Potential applications with preliminary experimental results in large-mode-area lasers and partial coherent sources will be presented.



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