



NEWS

from the **Science of Light**

Dear ,

Here you can find news about research and people from our institute.
Enjoy reading our September issue!

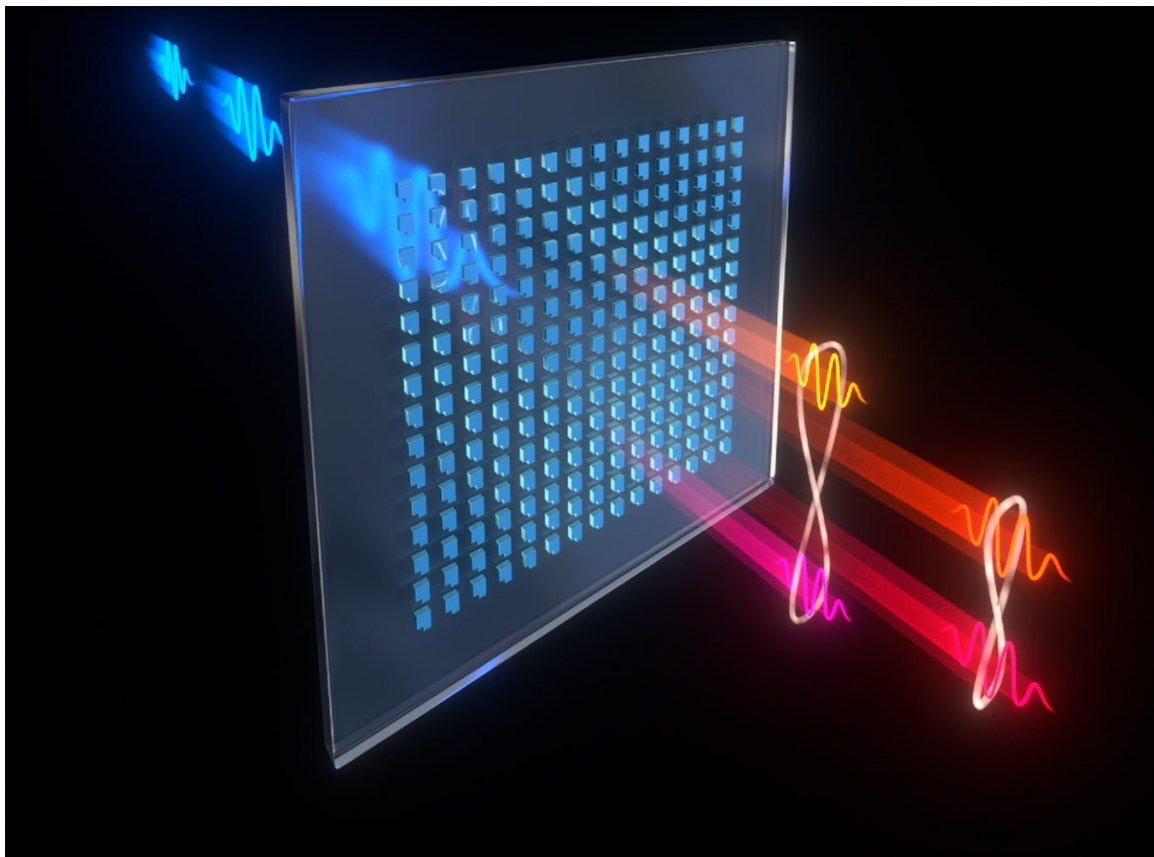
Yours sincerely,

Max Planck Institute for the Science of Light

Research

Metasurfaces offer new possibilities for quantum research

Tomás Santiago-Cruz and Maria Chekhova from the Max Planck Institute for the Science of Light in cooperation with the group of Igal Brener from Sandia National Laboratories have published a new paper in *Science*, which demonstrates the first generation of frequency-nondegenerate and multiplexed photon pairs driven by bound states in the continuum resonances in symmetry-broken GaAs metasurfaces. > **MORE**



Learning how machines learn

Scientists from the University of Toronto and Mario Krenn from the MPL have developed a new method for observing how artificial neural networks process information and learn. > **MORE**

Publications

Cooperative subwavelength molecular quantum emitter arrays

A group around MPL research group leader Claudiu Genes has published a paper in the journal *Physical Review Research*. They showed that dipole-coupled subwavelength quantum emitter arrays respond cooperatively to external light fields as they may host collective delocalized excitations with super- or subradiant character.

R. Holzinger, S. A. Oh, M. Reitz, H. Ritsch, and C. Genes, Cooperative subwavelength molecular quantum emitter arrays, *Phys. Rev. Research* 4, 033116 – Published 11 August 2022

Events

Diagnosis and therapy of ME/CFS: What can we learn from Long Covid?

Bavarian health minister Klaus Holetschek visited Erlangen to find out first hand about the current state of research into Long Covid and ME/CFS – using technology developed at MPL. > **MORE**



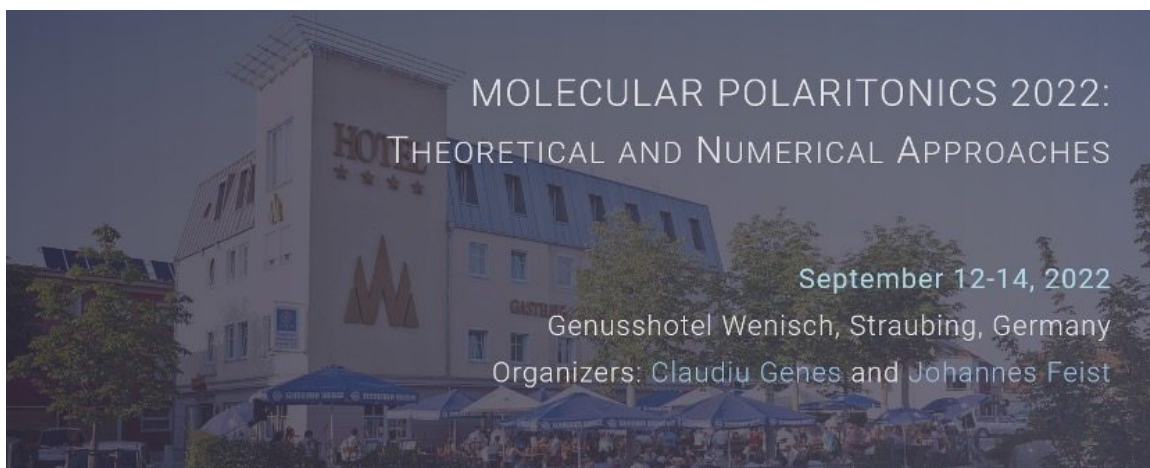
Max Planck School of Photonics Autumn School in Erlangen

The Max Planck School of Photonics (MPSP) kicked off its annual Autumn School Retreat with a visit to the Max Planck Institute for the Science of Light. > **MORE**

News

Claudiu Genes was organizer at Molecular Polaritonics 2022

After two years of delay due to the pandemic, the second edition of Molecular Polaritonics was held as a “conventional” in-person workshop in Straubing, Germany, from September 12 to September 14, 2022. The organizers were Claudiu Genes from MPL and Johannes Feist from Universidad Autónoma de Madrid, Spain. > **MORE**



Postdoctoral Position in Molecular Quantum Optics: Would you like to work in a highly motivated research team that aims to understand and control the interaction of quantum emitters, in particular organic molecules, with their nanoscopic environment and with each other? > **MORE**

Postdoctoral position for developing a novel source of squeezed light for quantum imaging: Do you have a strong grasp of experimental optics as well as quantum and nonlinear optics? Are you interested in a project that will build sources of pulsed squeezed light for future use in a quantum-enhanced TIRF microscope? > **MORE**

Looking for a Master's degree or Ph.D. at the forefront of optics?

> **MORE**

This newsletter was sent to you by a colleague? You would like to get the latest news, too? Then please register here: > **NEWSLETTER**

If you have received this in error, or if you'd rather not receive further emails of this kind, you can > **UNSUBSCRIBE** here.

Impressum:

Max-Planck-Institut für die Physik des Lichts

Staudtstraße 2

91058 Erlangen

Newsletter abbestellen