

NEWS

from the **Science of Light**

Dear,

We would like to share with you some of the news about research and people from our institute. We hope you enjoy reading our eighth issue for 2023!

Yours sincerely,

Max Planck Institute for the Science of Light (MPL)

Research

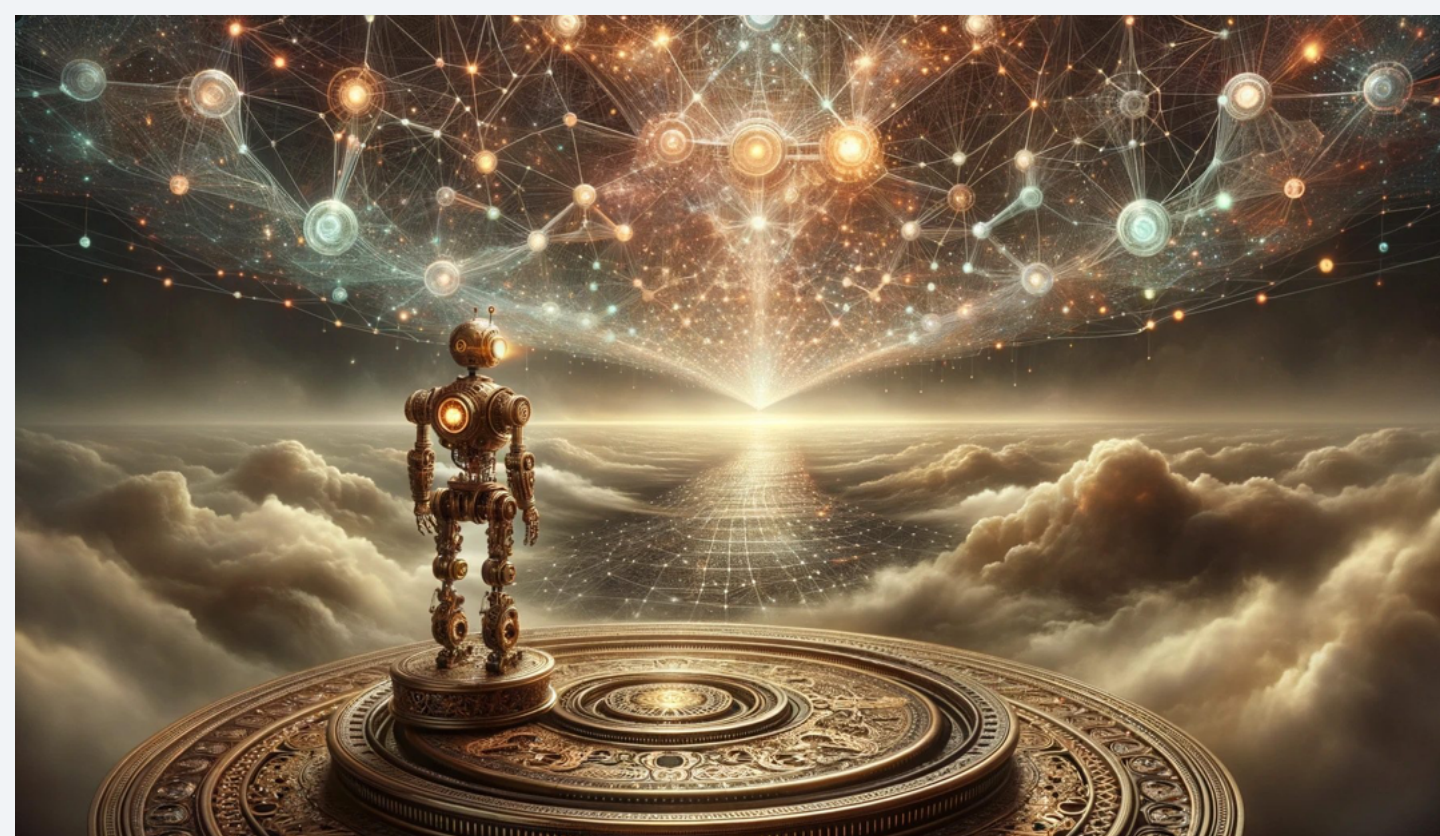
Deciphering the Secrets of Spinal Cord Regeneration Protein by Protein

Scientists have long sought to understand how certain animals, such as zebrafish, are able to regrow nerve fibers and regain lost motor function after spinal cord injury. In humans, these injuries are irreparable and result in permanent loss of function. An international team led by Daniel Wehner at MPL and the Max-Planck-Zentrum für Physik und Medizin has been able to show that a group of previously little-studied proteins inhibit regeneration of the central nervous system in mammals by altering the structural and mechanical properties of the wound tissue. > **MORE**



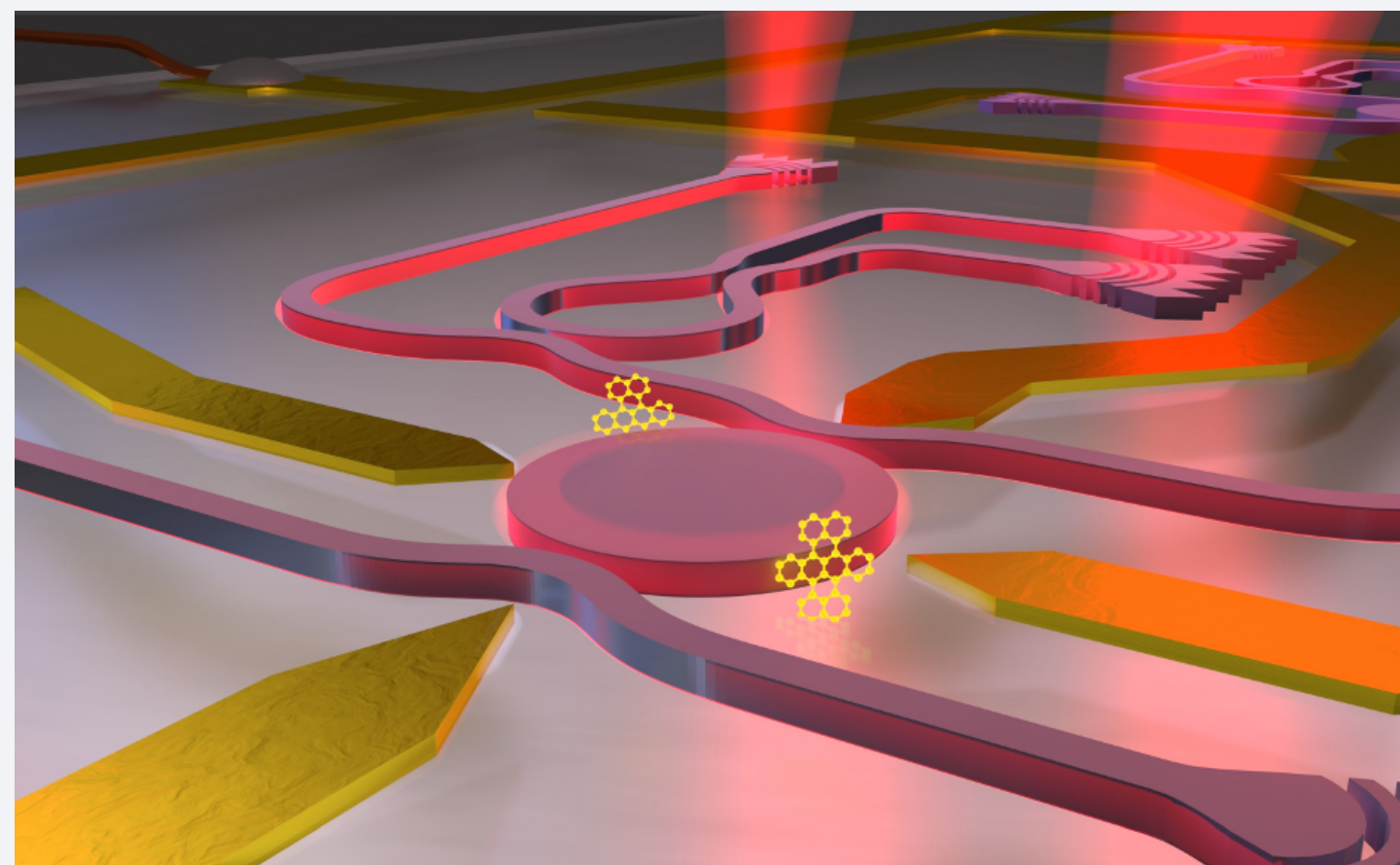
Artificial Intelligence Predicts the Future of Artificial Intelligence Research

It has become nearly impossible for human researchers to keep track of the overwhelming abundance of scientific publications in the field of artificial intelligence and to stay up-to-date with advances. Scientists in an international team led by Mario Krenn at MPL have now developed an AI algorithm that not only assists researchers in orienting themselves systematically but also predictively guides them in the direction in which their own research field is likely to evolve. > **MORE**



On-chip interference of scattering from two individual molecules embedded in plastic

Physicists at MPL have succeeded in coupling two organic molecules embedded in a plastic film via an integrated photonics circuit. > **MORE**



Events

A Look Back: The Long Night of Science at MPL

Nearly 1,500 visitors wanted to learn everything about the interaction between light and matter during this year's Long Night of Science and were guests at MPL until just after midnight. The Long Night of Science is the largest science festival in the metropolitan region of Erlangen-Nuremberg and the largest of its kind in Germany. > **MORE**



Federal Patent Court Visits MPL

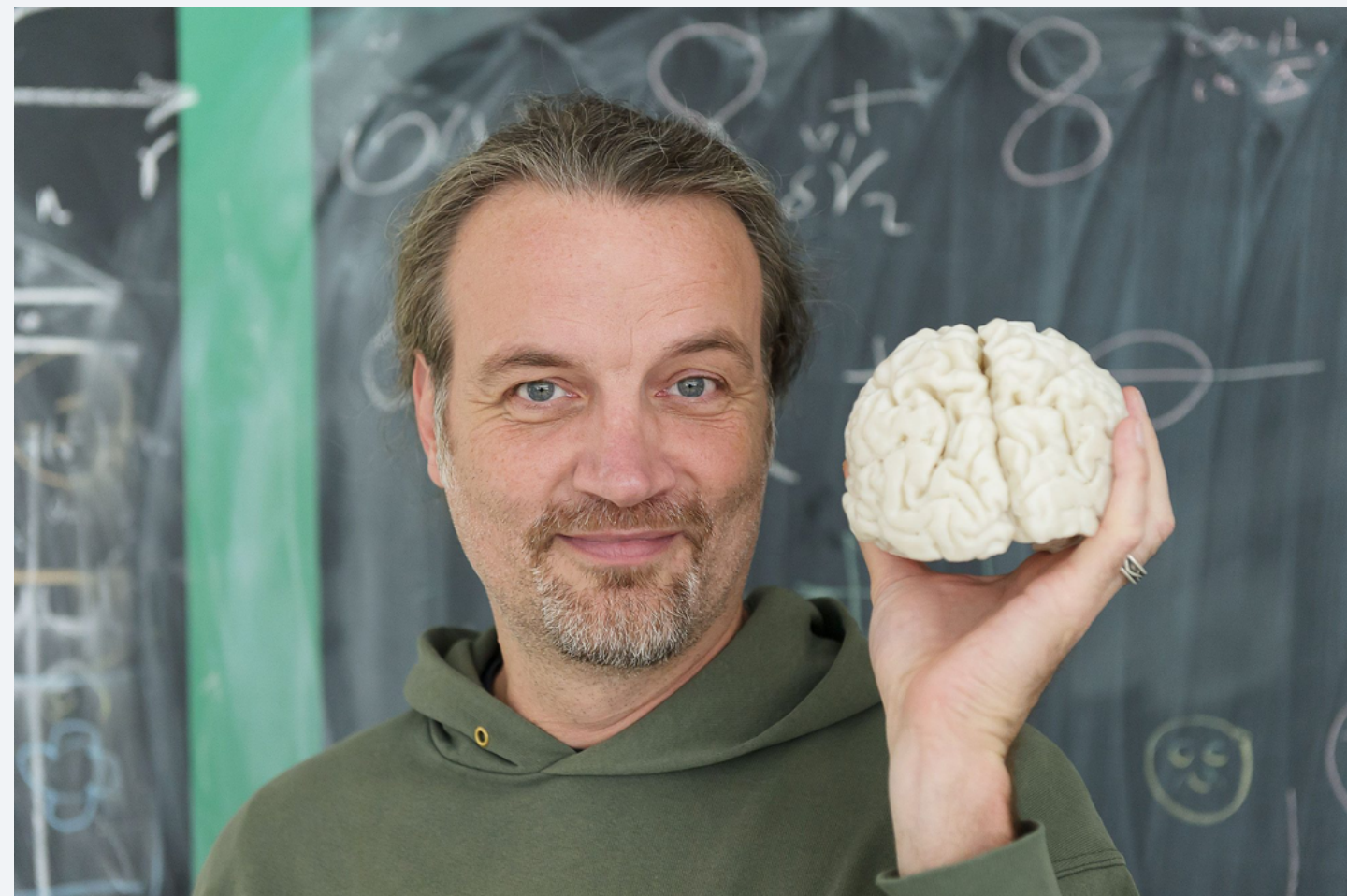
As part of a training initiative of the 19th and 4th Senates of the Federal Patent Court in Munich, a five-member delegation visited MPL. The aim of the senate training was to inform the judges about the state of research and technology directly at the origin of potential inventions. Our institute provided optimal conditions for the participants to get a picture of the entire process from basic research to the spin-off of a start-up company. > **MORE**



Max-Planck-Zentrum für Physik und Medizin

Unravelling the Secrets of Brain Folding: UNFOLD Research Project at Max-Planck-Zentrum für Physik und Medizin Receives ERC Synergy Grant

Physicist and veterinarian Prof. Dr. Kristian Franz, Research Group Leader at the Max-Planck-Zentrum für Physik und Medizin (MPZPM) and Director of the Institute for Medical Physics and Microtissue Engineering at the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), has been awarded an ERC Synergy Grant. The grant, worth a total of 10 million euros, will support interdisciplinary research in the field of brain folding over the next six years. > **MORE**



Jobs

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 Positions in Nano-Bio-Physics: We are looking for highly skilled hands-on physicists, physical chemists, biochemists, and biologists for conducting paradigm-shifting interdisciplinary research at the cross roads of experimental nanophysics and life sciences. > **MORE**

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

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Want to work with us on the cutting edge of the Science of Light?

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