

Best Theoretical Doctoral Thesis in Condensed Matter Physics 2017



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Carlos Sánchez Muñoz has been awarded by [GEFES](#) with the prize for the *Best Theoretical Doctoral Thesis in Condensed Matter Physics 2017*. Carlos made his doctoral thesis “Generation of Non-classical States of Light” in the [Department of Theoretical Condensed Matter Physics, Universidad Autónoma de Madrid](#) and IFIMAC under the supervision of [Carlos Tejedor](#) and [Fabrice P. Laussy](#). He currently has a contract as Post-Doc at the [Center for Emergent Matter Science \(CEMS\)](#), in Riken, Tokyo. [\[Read more\]](#)

[Francisco J. Garcia-Vidal](#) included in Clarivate 2017 Compilation of Most Influential Authors

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professor at the Department of Theoretical Condensed Matter Physics..

Highly Cited Researchers from [Clarivate Analytics](#) is an annual list recognizing leading researchers in the sciences and social sciences from around the world. The final new list contains about 3,400 Highly Cited Researchers in 21 fields of the sciences and social sciences. The 2017 list focuses on contemporary research achievement: only Highly Cited Papers in science and social sciences journals indexed in the Web of Science Core Collection during the 11-year period 2005-2015 were surveyed. Highly Cited Papers are defined as those that rank in the top 1% by citations for field and publication year in the Web of Science. In the list of Physics, in which [Prof. Garcia-Vidal](#) has been selected, only five researchers working in Spanish institutions have been included. [Clarivate 2017 compilation of researchers list](#). We congratulate [Prof. Francisco J. Garcia-Vidal](#).

[Winner of the IUPAP Young Scientist Prize in Atomic, Molecular and Optical Physics 2017](#)



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International Union of Pure and Applied Physics (IUPAP) announces Dr. Johannes Feist, IFIMAC member, as winner of the IUPAP Young Scientist Prize in Atomic, Molecular and Optical Physics 2017

The award of IUPAP Young Scientist Prizes in Atomic, Molecular, and Optical Physics recognizes the recipients outstanding contribution to the areas of physics within the remit of the Commission. The Prize includes a certificate, a medal, a EURO 1,000 award and an invited presentation at ICPEAC.

[Dr. Johannes Feist](#) received his Ph.D. from Vienna University of Technology in 2009 and afterwards was awarded the ITAMP postdoctoral fellowship at the Institute for Theoretical Atomic, Molecular and Optical Physics (ITAMP) at the Harvard-Smithsonian Center for Astrophysics and Harvard University. In 2012 Johannes joined to the group of [F. J. García Vidal](#) as a senior postdoc at the Department of Theoretical Condensed Matter Physics at the [Universidad Autónoma de Madrid](#), and in 2017, he started a tenure-track position as an IFIMAC Young Researcher at the [Condensed Matter Physics Center](#) (IFIMAC) in the same university.

His current research focuses on the influence of strong light-matter coupling on the properties of organic materials. In this regime, the interaction between transitions in emitters and confined light modes becomes strong enough that the elemental excitations of the system become hybridized light-matter states, so-called polaritons. This can lead to changes in material properties and even significantly modify chemical reactions. Johannes has made a number of significant contributions to this rapidly growing field, and in particular developed a theory combining molecular physics with

cavity QED that can treat polaritonic chemistry by extending the concept of molecular potential energy surfaces to the strong-coupling regime. Based on this work, he has been able to show that nuclear motion in separate molecules could become correlated through their common interaction to a single light mode, as well as that photochemical reactions can be significantly suppressed or novel reaction channels opened under strong light-matter coupling with organic molecules.

[More information](#)

[Awarded candidates from 2007 to 2017](#)

We congratulate Dr. Johannes Feist
