

The 2020 Fritz London Memorial Prize Winners

Frank Steglich

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<https://www.cpfs.mpg.de/person/32815/1453296>



Citation: *"The Fritz London Memorial Prize is awarded to F. Steglich in recognition of his discovery and exploration of the unconventional superconductivity in heavy fermion metals."*

Frank Steglich is director emeritus at the Max Planck Institute for Chemical Physics of Solids (MPI CPfS) Dresden.

He obtained his PhD in 1969 in Göttingen with an experimental thesis on the low-temperature heat transport in thin quench-condensed metal films.

Being a research associate at Cologne University he earned his habilitation in 1976. 1978-98 he was professor of physics at Darmstadt Technical University. In 1996 he was selected to be founding director and director of the Department of Solid-State Physics at MPI CPfS, where he retired in 2012. In the same year he became

founding director of the Center for Correlated Matter (CCM) at Zhejiang University, Hangzhou, China where he is still director and Qiu Shi Distinguished Visiting Professor.

His research interests are disordered metals, materials with strongly correlated electron systems, unconventional superconductivity, quantum criticality and thermoelectricity. In 1979, his group discovered bulk superconductivity in the heavy-fermion metal CeCu_2Si_2 , which is considered the first unconventional, i.e., non-phonon-mediated superconductor. His current focus is essentially quantum criticality, notably of unconventional 'partial Mott' type, and its interplay with superconductivity.

Frank Steglich is Fellow of the American Physical Society, Distinguished Visiting Professor at the Institute of Physics, Chinese Academy of Sciences, Beijing and member of several academies. He was awarded with honorary doctorates from the Universities at Augsburg, Cologne, Frankfurt/Main and the Jagiellonian University, Kraków as well as an honorary professorship from the Trzebiatowski Institute for Low-Temperature and Structure Research of the Polish Academy of Sciences, Wrocław. He received the Gottfried Wilhelm Leibniz Prize (DFG), Stern-Gerlach Medal (DPG), Gay Lussac-Humboldt Award (AvH), Hewlett Packard Europhysics Prize (EPS), International Prize for New Materials (APS), Magnetism Award (ICM, IUPAP), Bernd T. Matthias Prize for Superconducting Materials (M^2S , $T_c\text{SUH}$) and Order of Merit, Federal Republic of Germany.