



With more than 6,300 employees in research, teaching and administration and its unique profile, TU Dortmund University shapes prospects for the future: The cooperation between engineering and natural sciences as well as social and cultural studies promotes both technological innovations and progress in knowledge and methodology. And it is not only the more than 34,300 students who benefit from that.

Postdoc position (m/w/d)

The **Cinchetti Group in the Faculty of Physics** is an international research group devoted to the optical control of collective excitations in 2D systems using ultrafast pump-probe methods: <http://www.e6.physik.tu-dortmund.de/>
We invite applications for a near term position as a Research Assistant (Postdoctoral Student) limited for two years, with possibility of prolongation. The salary follows the regulations of the collective bargaining law in salary class 13 TV-L or, if applicable, by transitional law (TVÜ-L). This is a full-time position. Employment in or reduction to part-time is generally possible.

YOUR TASKS

Besides teaching for 4 hours per week during the semester, you will be responsible of coordinating the time-resolved ARPES experiments that are currently planned in our group within the framework of the following projects:

- the Project A08 of the TRR142 <https://trr142.uni-paderborn.de/>
- the FETOPEN Project SINFONIA (Selectively activated INFORMATION technology by hybrid Organic InterfAces). <https://www.sinfonia-fet.eu/>
- the FETOPEN Project INTERFAST (Gated INTERfaces for FAST Information Processing) <https://www.fet-interfast.eu/>

In a nutshell, the projects deal with the ultrafast (i.e. femtosecond) manipulation of spin and charge excitations (magnons, excitons, plasmons) in two-dimensional electronic systems, with special focus on antiferromagnetic systems and molecular compounds.

The projects will be realized by utilizing our recently developed setup for time-resolved (tr)ARPES with fs-XUV radiation (<https://e6.physik.tu-dortmund.de/instrumentation/spin-and-time-resolved-photoelectron-spectroscopy/>). trARPES is performed using a novel photoemission electron microscope that allows to perform micro-ARPES with large angular acceptance (so-called momentum microscopy), coupled to a setup for XUV generation. Further details about all our lab facilities can be found on the group homepage.

WE OFFER

- you will be strongly encouraged and supported to apply for personal grant on a topic related to the main activity of the Cinchetti group.
- the possibility to gain experience in the supervision of PhD and Master students.
- visibility of the working group on an international level

YOUR QUALIFICATION

In order to successfully carry out the described activities, the candidate should:

- have a deep knowledge in solid state physics, magnetism, and ultrafast lasers
- have experience in ultrafast spectroscopy methods, especially photoelectron spectroscopy (ARPES)
- have experience in the supervision of bachelor, master and PhD students
- have an excellent publication track record

ABOUT YOU

You like working in a team and plan to pursue an academic career.

TU Dortmund University strives to increase the number of women in academic research and therefore encourages women to apply. We explicitly note that applications of severely disabled persons are welcome.

Please send applications with the usual documents (no originals), quoting the reference number **w32-23** until **31.08.2023** to:

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For further information, please do not hesitate to contact:

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