

We are seeking a highly motivated PhD student to work on **theoretical aspects related to many-body quantum optics**, and specifically on **chiral many-body quantum optics** in the presence of structured environments. At the end of the PhD, the successful applicant will have developed skills such as:

- The realistic description of light-matter interactions in different physical platforms such as atoms coupled to photonic crystals and nanofibers.
- The study of the dynamics and dynamical phases in open quantum systems.
- The creation and analysis of non-classical states of light.

The PhD will take place under the supervision of Dr. Beatriz Olmos Sanchez (<https://sites.google.com/site/beatrizolmosphysics/>) within the research group 'Theoretical Atomic Physics and Synthetic Quantum Systems' (www.open-quantum-systems.com). Our group is embedded in the lively environment of the 'Center for Quantum Science' of the University of Tübingen, which includes groups working on cold atoms experiments as well as mathematical and theoretical physics. The successful applicant is expected to actively engage in the activities of the Center.

Candidates need to have a strong background in theoretical physics, a strong academic record, commitment, and a motivation to work hard.

Applications should include a cover letter (including motivation for applying), a CV (including publication list), a copy of the master thesis and transcripts (all collated in a single pdf file). Applicants should also arrange for at least one recommendation letter. All documents shall be sent to beatriz.olmos-sanchez@uni-tuebingen.de.

The offered position (2/3 E13) will run for at least 3 years. Review of the applications will begin on May the 1st 2021 until the position is filled. The starting date is flexible but can be as soon as possible.

For enquiries please send an email to beatriz.olmos-sanchez@uni-tuebingen.de.