



**Master or junior/senior undergraduate research project available:**

**Design and simulation of collective nano-electro-mechanical modes for applications in quantum nano-photonics and sensing**

We have an exciting interdisciplinary project available in the Hybrid Integrated Quantum Photonics Lab, Birck Nanotechnology Center.

The research project involves design and finite element simulation of a nano-mechanical system using software such as COMSOL, AutoDesk or similar packages. We are interested in studying electro-mechanical modes of nano-structures under strain gradient.

Prior experience with finite element analysis software for modeling micro or nano-mechanical systems is desirable.

Interested students may contact Prof. Mahdi Hosseini via email [mh@purdue.edu](mailto:mh@purdue.edu) to make an appointment and discuss the project in more details.

Website: <https://engineering.purdue.edu/HiQP>