Summer Undergraduate Openings

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Research on circuit-based dynamic metamaterials

Our group is seeking undergraduate researchers for conducting experimental research on dynamic metamaterials produced using topo-electric circuits. General academic interest in quantum mechanics and fundamental physics is appreciated.

Hands on proficiency with the following topics is required.
- One of the following:
  o Circuit design and analysis using discrete components, or
  o Microwave circuits e.g. microstrip lines
- Fourier transforms and analysis.

Experience with the following is desirable.
- RF test and measurement tools e.g. network analyzers, S-parameters.
- FPGAs, and general familiarity with digital and mixed-signal systems

The research project is closely related to the following recent papers from our group --
https://www.nature.com/articles/nature25777
http://advances.sciencemag.org/content/4/6/eaat0232
https://www.nature.com/articles/s41586-020-03117-3

COVID considerations

While some aspect of remote work will be possible, about 50% of the effort will need to be in person in our lab. Our lab is using calendars to minimize student overlap on shared equipment and shared spaces.

Timeline and application

The position is available beginning immediately, however we can accommodate a wait until the summer semester. Interested candidates should contact Prof. Bahl with a complete CV, accompanied by a short paragraph highlighting relevant practical experience. Women and students from minority backgrounds are encouraged to apply.