

Faculty Name:

Chris Marianetti

Faculty Email:

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Lab:

Marianetti Group

Project Title:

Computing phonons from first principles

Description:

This project involves computing phonons from the first-principles of quantum mechanics. Two common approaches used for computing phonons are finite difference based techniques and linear response. This project aims to quantitatively assess the pros and cons of each technique in a variety of different systems. Prospective students should have a background in materials physics, programming, and open source density functional theory codes.

Location of Research:

On Site

of hrs/week:

35

Department/Program:

Applied Physics and Applied Mathematics

Eligibility:

BS, Third Year, BS, Fourth Year

To apply, please contact:

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