

Roadmap to Graduation

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April 1, 2019

1 Plan of Study

For the remainder of my studies, I will be entirely focused on my research rather than coursework, excluding professional development activities. Having completed the program requirements, I am not planning on enrolling in additional courses but will monitor and search for relevant special topics courses in Applied Math and Optical Science. I will continue to implement various additional capabilities to the Transverse Maxwell Semiconductor Bloch Equations model including nonlinear geometries with non-normal incidences, PT symmetric gain chips, Kerr and thermal lensing capabilities, and arbitrary pumping schemes for higher order mode generation.

2 Professional Development

My NDSEG fellowship will provide funding through my planned graduation date of May 2021. Thus, I will not likely be teaching for the remainder of my degree program. I am already planning on attending a fellowship conference in San Diego in July where I will present my work. I am also planning on attending further conferences, focusing on both the mathematical and the optical aspects of my research. I am considering pursuing an internship at a national lab my fourth summer to gain experience in lab based research and give myself some added credibility when applying for jobs post-graduation. I will continue my community outreach efforts through volunteering with the various local organizations and non-profits such as S.Y.STEM Coalition with whom I have already taught many science and mathematics based camps and experiences.