

Premjith Thekkepatt

Education

- 2013–2018 **5 Years Integrated MSc in Photonics**, International School of Photonics, Cochin University of Science and Technology, Graduation June 2018.
Average CGPA: 7.88/10
- 2011–2013 **Senior Secondary Schooling**, M.E.S Central School, Tirur, Kerala State, India, Main Stream Subjects: *Physics, Chemistry, Mathematics, Biology and English*, All India Senior Secondary Certificate Examination, Central Board of Secondary Education .
Percentage: 92 %
- 2011 **Secondary Schooling**, M.E.S Central School, Tirur, Kerala State, India, All India Secondary School Examination, Central Board of Secondary Education.
CGPA: 8.8/10

Research Experience

- Current **Master Thesis**, I.E.S.L, FORTH, Greece, Under the guidance of Dr. Wolf von Klitzing.
Position Construction and realization of Bose Einstein condensate for neutral rubidium atom in an offset compensated QUIC trap. *In Progress*
- May – June 2017 **Visiting Research Student**, QUEST, P.T.B, Germany, Under the Guidance of Prof. Dr. Piet O Schmidt, Highly Charged Ions Group.
Building a "Electro Optic frequency comb" with intra-cavity electro-optical modulator (EOM).
- May – June 2016 **Summer Research Student**, I.E.S.L, FORTH, Greece, Under the guidance of Prof. Wolf von Klitzing.
Designing of high resolution imaging system using aspheric lenses, for fluorescence and absorption measurements in matter waves optics experiment.
- December 2015 **Winter Project Student**, In the research group of Prof. P K Panigrahi, IISER Kolkata.
Protective measurement protocol in single trapped ion for state mapping.
- May-June 2015 **Summer Project Student**, In the research group of Prof. P K Panigrahi, IISER Kolkata.
Weak measurements in singly trapped ions and resultant generation of Schrödinger Cat states

Computation skills

- Basic OptiWave FDTD Simulations, Autodesk Inventor, C++
Intermediate Wolfram Mathematica, LaTeX
Advanced Zemax: Optical Designing, Matlab, Rada

Publications

A self-injection locked DBR laser for laser cooling of beryllium ions

King, S.A., Leopold, T., Thekkepatt, P. et al. Appl. Phys. B (2018) 124: 214.

Hypersonic transport of Bose-Einstein condensates in neutral-atom accelerator ring

Under review with Nature

Languages

Malayalam **Native Speaker**
English **Near Native**
Tamil **Basic**

Achievements

Topper in Physics at AISSCE 2012-2013 in CBSE schools under MESSEB, Kerala

President, O.S.A Student Chapter, ISP-CUSAT, 2017-2018

Secretary, O.S.A Student Chapter, ISP-CUSAT, 2016-2017

Student Co-ordinator O.S.A IONS KOCHI 2017

Student Co-ordinator, ETCH-NEW School Students Outreach Program,ISP-CUSAT