

Dr. Vineet Bharti



PhD Institution and Year : Institution: Indian Institute of Technology Roorkee, 2014

Date of Joining IISc : 5th Feb. 2014

Area(s) of Research : Atomic Physics, Quantum Optics

Name of the Post-doctoral Fellowship : DS Kothari post-doctoral fellowship

Laboratory where currently working : Atomic & Optical Physics Lab

Department : Physics

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Topic(s) of Research : Study of quantum optical phenomena and their applications in multi-level Systems

Research Publications in IISc :

1. "Polarization-rotation resonances with sub-natural widths using a control laser," Sapam Ranjita Chanu, Kanhaiya Pandey, **Vineet Bharti**, Ajay Wasan and Vasant Natarajan, *Europhys. Lett.* **106**, 43001 (2014).
2. "Study of a four-level system in vee+ladder con_figuration," **Vineet Bharti** and Vasant Natarajan, *Opt. Commun.* **356**, 510 (2015).
3. "Wavelength mismatch effect in electromagnetically induced absorption," **Vineet Bharti**, Ajay Wasan and Vasant Natarajan, *Phys. Lett. A* **380**, 2390 (2016).
4. "Role of dressed-state interference in electromagnetically induced transparency," Sumanta Khan, **Vineet Bharti** and Vasant Natarajan, *Phys. Lett. A* **380**, 4100 (2016).
5. "Sub- and super-luminal light propagation using a Rydberg state," **Vineet Bharti** and Vasant Natarajan, *Opt. Commun.*, **392**, 180 (2017).

6. "Coherent population trapping (CPT) versus Electromagnetically induced transparency (EIT)," Sumanta Khan, M. P. Kumar, **Vineet Bharti** and Vasant Natarajan, *Eur. Phys. J. D*, **71**, 38 (2017).

Other accomplishments and recognition while in IISc :

What information will be useful to post-docs if it is available on the post-doc page on the IISc Website ? List the items.

A tweet about your post-doctoral experience in IISc :

It is a great learning experience for me. I did my doctorate in theoretical Quantum Optics. Here, in the Atomic & Optical Physics Lab, I got an opportunity to work on the experiments related to Atomic Physics and Quantum Optics. The ongoing experimental experience has improved my theoretical insight as well. My mentor's quest for perfection always encouraged me to perform well in my post-doctoral project.