# **Energy Depostion into the Intergalactic Medium**

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A Thesis submitted to the Jawaharlal Nehru University for the Degree of Doctor of Philosophy

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Raman Research Institute Bangalore 560 080

India

### Certificate:

This is to certify that the thesis entitled "Energy Deposition into the Intergalactic Medium" submitted by Suparna Roychowdhury for the award of the degree of Doctor of Philosophy of Jawaharlal Nehru University is her original work. This has not been published or submitted to any other University for any other Degree or Diploma.

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#### Declaration:

I hereby declare that the work reported in this thesis is entirely original. This thesis is composed independently by me at Raman Research Institute under the supervision of Dr. Biman B. Nath. I further declare that the subject matter presented in this thesis has not previously formed the basis for the award of any degree, diploma, membership, associateship, fellowship or any other similar title of any university or institution.

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Since this is the only part of my thesis which would be read by anybody other than my poor examiners who don't have a choice in this matter, I had always thought that I would indulge myself in writing a long, detail acknowledgment to bore everyone. However, I think, after actually finishing a ph.d thesis, I am happy writing a small note of gratitude to RRI and everyone who has been part of my eventful life in the last five years. As Nadeem would agree, the road has been long and I have grown up.

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