



## Department of Physics

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Lawrence Berkeley National Laboratory  
Organization CS Computing Sciences

With this letter I would like to support Santosh Dubey's application for the Luis W. Alvarez Fellowship in Computing Sciences.

From August 2006 to August 2008 Santosh completed with me his Master of Science degree in Scientific Computing (Physics track) at FSU's School of Computational Science (now Department of Scientific Computing).

For a master student Santosh was highly successful and participated in two publications, one as my sole co-author in Physical Review Letters. In this paper we developed a simple kinematical approach for phase conversion in finite volumes, based on the Kolmogorov-Johnson-Mehl-Avrami theory. Reliably, Santosh did most of the numerical work. In a follow-up paper together with Alexei Bazavov, one of my Ph.D. students at that time, we applied this approach to the 3D Potts model and published in Nuclear Physics B.

In 2008 I returned from the School of Computational Science to the Physics Department and did no longer take students in Scientific Computing. As Santosh pursued a Ph.D. degree in Scientific Computing, it became necessary for him to switch professors and I did not follow up on details of his Ph.D. work, though he visited me occasionally and talked about his research. In these discussion I found him always very knowledgeable. Certainly, Professor Anter El Azab will give you an account of Santosh's dissertation.

From my experience, I recommend Santosh strongly and like also to emphasize his very pleasant personality.

Sincerely yours,

Bernd Berg  
(Dirac Professor of Physics)