

Motivation Letter

March 5, 2020

Dear Sir/Madam

I am writing this letter to attend summer school on “**Effective HPC for Climate and Weather**” in University of Reading, Whiteknights Campus, Reading, UK, from 23-28 August in 2020. I am a Ph.D student in Department of Applied Mechanics at Indian Institute of Technology Delhi (IIT Delhi) and is working on “*Interaction of Large Scale Flows with Atmospheric Flows: Climatic Aspect*”. The workshop will be directly beneficial for my PhD research where I am trying to develop an understanding of the generation of stationary waves through orography and their non-linear interaction through simpler like aquaplanet, single column models in GCMs and then applying the knowledge to understand their importance for our planet earth by using hierarchical numerical modelling tools. In addition, I am also trying to understand the association between Antarctic orography and South Asian monsoon a set of numerical experiments were performed using a global climate model (NCAR CESM-CAM).

I am keen in attending the post-processing and visualization related discussions in this HPC workshop with focus on post processing tools. This summer school provides me with an opportunity to interact with experts working in field of atmospheric dynamics and modelling at the United Kingdom (UK) and will help me in exploring different aspects of the problem associated with data handling and post processing encountered in climate models. Currently, my strength is in numerical modelling of the large scale flows and the knowledge acquired from this summer school will help me to understand the challenges faced by the scientific community in the field of numerical modelling which will directly improve the quality of my work. In addition this will promote knowledge transfer in terms of the required training and skills which I will be able to pass to my fellow researchers in India.

I would therefore highly appreciate this opportunity to attend this summer school with international presence. As an early career researcher, the summer school will inspire me to work inherently and independently at the International level in the field of climate modelling and its future prospects.

I look forward to hearing for soon.

Yours sincerely,

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