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CHIPP chairman  
Physik - Institut Universität Zürich  
Winterthurerstrasse 190  
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Dear Prof. Ulrich Straumann,

This is the mail in reference to the advertisement for the post “post-doctoral research fellow with opportunities to work on the LHC experiment at CERN’s Large Hadron Collider”.

I did my thesis on CMS experiment in 2007. In CMS, I worked on performance of jet algorithms in comparison to Seedless Infrared-Safe Cone (SISCone). We proposed that SISCone be adopted as the default cone based jet clustering algorithm for CMS (**Published in CMS AN 2008/02**). Under search for new phenomena, I studied CMS sensitivity to quark contact interactions in the dijet final state using the new CMS software framework for simulation and reconstruction (CMSSW). My analysis demonstrates that the present Tevatron limit on quark compositeness will be crossed only with  $10 \text{ pb}^{-1}$  of data (**Published in J. Phys. G36:015004,2009**).

After my graduation, I got an opportunity to work on real data for CDF experiment. Presently a post doctoral fellow at INFN Bologna, Italy working for CDF experiment. I am using the ratio of x-section of dijets to search for quark compositeness at Tevatron energy (**Abstract accepted to APS 2009, Denver**). Under CDF offline computing group, I am actively involved in proposing and implementing a new data transfer model that uses Storage Resource Managers (SRMs) as local caches for remote Monte Carlo production sites, interfaces them with the experiment data catalog, and finally realizes the file movement exploiting the features provided by the catalog data transfer layer (**Presented in CHEP 21-27th March, 2009, Prague**).

I feel that I am well qualified to make an effective and useful contribution to the “post-doctoral research fellow with opportunities to work on the LHC experiment at CERN”. Please contact me if you require any further information.

Yours Faithfully,

Dr. Manoj Kumar Jha

encl: My curriculum vitae.  
List of publications.