EVALUATION SUMMARY REPORT

Proposal Nr :	235230	***Acronym :***	ITES
Scientist in Charge Name :	Donatella Lucchesi		
Instrument :	FP7-PEOPLE-IOF-2008	***Scientific Panel:***	PHY
Title :	Innovative Tools for Event Selection in high energy physics		

Overall score (Threshold : 70)	90
Has the proposal passed all numerical thresholds?	Yes

1. Scientific quality of the project (Weight 25/ Threshold 3) ***Mark (out of 5)***

STRENGTHS of the proposal: + This is a well-shaped, ambitious proposal. + The project is well timed to cover the final phase of CDF data taking and could make a potentially very important contribution to LHC before the bulk of the data will be taken. + The approach is innovative and orginal, and will be highly relevant if successful. + The proposed methodology is appropriate and state-of-the-art. + The project is a rare combination of physics analysis and advanced technical development. Combining work on trigger and analysis is of clear benefit for the understanding and interpretation of the data. + The technical devices to be developed have potential applications in many fields. + The applicant's profile is nicely matched to the project; she has substantial experience in many aspects of the work to be performed but will also acquire complementary experience. + The outgoing host is a world-class particle physics laboratory hosting the CDF experiment, and the project supervisor is highly competent and well recognised. + The return host has a long-standing particle physics experience and a renowned supervisor. WEAKNESSES of the proposal: - It is not quite clear to what extent the ultimate physics analysis (Higgs search) is actually part of the project. - The dependence of the project on other activities in LHC experiments, e.g. calibration and alignment, is not addressed.	4.6

2. Training activities (Weight 15 / Threshold 3) ***Mark (out of 5)***

STRENGTHS of the proposal: + The training objectives as described focus mainly on technical aspects. This is a valid approach and will provide important competence to the applicant. + Some supervising and teaching are mentioned. + Both hosts have a very good record in training young researchers. + International experience outside the applicant's home country will be beneficial.	4.4

WEAKNESSES of the proposal: - An additional training focus on the underlying physics would have been good, in particular since the applicant's profile is not very pronounced in this aspect. - Not much is mentioned about acquiring skills in management, organisation and leadership issues.	

3. Quality of the researcher (Weight 25 / Threshold 4) ***Mark (out of 5)***

STRENGTHS of the proposal: + Rather experienced researcher, with significant achievements, both hardware-related and in data analysis. + She has proven high dedication and the capability to bring difficult projects to a successful end. + A long list of internal notes, preprints and conference proceedings demonstrates her proficiency. + The potential to acquire new knowledge and an advanced level of independent thinking are obvious. + The match between the fellow's profile and project is excellent. WEAKNESSES of the proposal: - The publication record as such (i.e. refereed papers with a significant contribution of the applicant) is minor. This can to a large extent be explained by the fact that the researcher has predominantly worked on preparatory, commissioning and algorithm development tasks which usually do not lead to collaboration publications. At the same time, it indicates that she has not yet carried a real physics analysis through to the end. - Leadership qualities are not yet obvious.	4.5

4. Implementation (Weight 15 / No Threshold) ***Mark (out of 5)***

STRENGTHS of the proposal: + Both hosts provide all necessary infrastructure and facilities. Membership in the relevant collaborations secures the access to experiments and data (although the return part is obviously not yet fully arranged). + The outgoing host is the leading center in the US in particle physics. + The return host is among the top institutions in Europe in particle and astroparticle physics. + Overall, the work plan appears to be realistic and feasible, the project is credible. WEAKNESSES of the proposal: - One of the major objectives is the development of optimised strategies for online and offline analysis. In the work plan the offline and optimisation aspects are not obvious. - No provision to monitor the progress of the project and to provide regular mentoring is described in the proposal. - It will not be easy to pursue at the same time Higgs search and hardware/supercomputer development, which might be necessary given the expected limited running time of CDF.	4.3

5. Impact (Weight 20 / No Threshold)	***Mark (out of 5)***
STRENGTHS of the proposal: + The candidate will strongly profit from the Fellowship and will advance in her scientific independence and maturity. + The strong ties between the US and Europe in particle physics will be reinforced and strengthened; dedicated longer-term follow-up cooperation appears to be possible. + The project aims to import an advanced technology and software development from the US to Europe, where the world-leading particle physics laboratory will profit from it. This is a clear contribution to European excellence and competitiveness.	4.6