Proposal Evaluation Form



EUROPEAN COMMISSION

7 th Framework Programme for Research

EVALUATION SUMMARY REPORT

Call: FP7-PEOPLE-2012-IEF

Funding scheme: MC-IEF (Intra-European Fellowships (IEF))

Proposal number: 330058
Proposal acronym: POTexHEP

Duration (months): 24

Proposal title: Precise Online Tracking for Experimental High Energy Physics Experiments

N.	Proposer name	Country	Туре	Total cost (€)	%	Grant requested (€)	%
1	UNIVERSITE DE GENEVE	CH					
	Total :						

Abstract :

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Marie Curie Intra-European Fellowships (IEF)

SCORING

Scores must be in the range 0-5. Decimal marks may be given.

Interpretation of the score:

- 0- The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information.
- 1- Poor. The criterion is addressed in an inadequate manner, or there are serious inherent weaknesses.
- 2- Fair. While the proposal broadly addresses the criterion, there are significant weaknesses.
- 3- Good. The proposal addresses the criterion well, although improvements would be necessary.
- 4- Very good. The proposal addresses the criterion very well, although certain improvements are still possible.
- 5- Excellent. The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.

Criterion 1. S&T QUALITY (award)

Issues to be addressed when assigning an overall mark for this criterion:

- Research/technological quality, including any interdisciplinary and multidisciplinary aspects of the proposal
- Appropriateness of research methodology and approach
- Originality and innovative nature of the project, and relationship to the 'state of the art' of research in the field
- Timeliness and relevance of the project
- Host research expertise in the field
- Quality of the group/scientist in charge

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Please use the following structure in your comments to this criterion:

- Strengths of the proposal (bullet point structure):
- Weaknesses of the proposal (bullet point structure):
- Overall comments:

(reflecting the relative importance of the strengths and weaknesses above mentioned)

(copy the text above in the comment box)

STRENGTHS

- + The research project is very challenging and of high quality. A new low-level track trigger for the LHC experiments will advance the state-of-the-art and will significantly improve the physics output in the high-luminosity phase of LHC. It is therefore of high relevance, and its development is timely.
- + The trigger will be based on a combination of parallel and/or serial computing architectures implemented using standard CPUs, FPGAs, and ASICs. This is an innovative approach that might also find applications in other fields of science or, e.g. in medical imaging. The project therefore is interdisciplinary.
- + The methodological approach is appropriately described. It starts from previous developments which have been proven to be very successful.
- + The host institute is a renowned university; the host group has made important contributions to the ATLAS construction.

WEAKNESSES

- The exact role of the fellow in this large project is not addressed in sufficient detail..
- The quality of the supervisor is not described in the proposal, and the scientific expertise of the host group in the field of the project is not clearly demonstrated.
- No risk assessment and "plan B" is specified in the proposal for the case that the project and the LHC time schedules would shift with respect to each other. This in particular applies for the applicant's intention to use the last LHC data before the long shutdown for test purposes.

Overall score (Threshold: 3.00/5.00, Weight: 0.25) 4.20

Criterion 2. TRAINING (award)

Issues to be addressed when assigning an overall mark for this criterion:

- Clarity and quality of the research training objectives for the researcher
- Relevance and quality of additional research training as well as of transferable skills offered, with special attention to exposure to the industry sector, where appropriate.*
- Measures taken by the host for providing quantitative and qualitative mentoring/tutoring

Please use the following structure in your comments to this criterion:

- Strengths of the proposal (bullet point structure):
- Weaknesses of the proposal (bullet point structure):
- Overall comments:

(reflecting the relative importance of the strengths and weaknesses above mentioned)

(copy the text above in the comment box)

STRENGTHS

- + The fellow will have the opportunity to acquire a variety of skills and competencies during the project. They are mostly useful for furthering his career and complement his existing expertise.
- + Some cooperation with electronics companies is expected; however, the proposal does not address precisely the degree of collaboration between these industries and the host.

WEAKNESSES

- The training plan and program are not very clear, and there is no mention of the corresponding experts at the host. The training objectives are presented as a long to-do list, which mixes training aspects and project benchmarks.

 Overall, the research training objectives are rather ambitious and might prove difficult to achieve within the timescale of the fellowship.
- Training in management, mentoring, or teaching aspects is not mentioned.
- The section on relevance and quality of additional research training is mostly a general description of the physics research at the host institution and no specific connection is made to the fellowship.

Overall score (Threshold: 3.00/5.00, Weight: 0.15) **3.50**

Criterion 3. RESEARCHER (award)

Issues to be addressed when assigning an overall mark for this criterion:

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- Research experience**
- Research results including patents, publications, teaching etc, taking into account the level of experience
- Independent thinking and leadership qualities
- Match between the fellow's profile and project
- Potential for reaching or re-enforcing a position of professional maturity*
- Potential to acquire new knowledge

Please use the following structure in your comments to this criterion:

- Strengths of the proposal (bullet point structure):
- Weaknesses of the proposal (bullet point structure):
- Overall comments:

(reflecting the relative importance of the strengths and weaknesses above mentioned)

(copy the text above in the comment box)

STRENGTHS

- + The applicant is experienced in data analysis and has very good computing skills. He has made substantial contributions to ATLAS analyses, and he has been entrusted with tasks such as sub-detector operation and Monte Carlo production. Analyses with his contributions have been published as ATLAS papers and notes.
- + The researcher has proven a substantial deal of ingenuity and independence. He has demonstrated to easily acquire new knowledge and will have ample opportunity to exercise this ability during the fellowship.
- + The project builds on the candidate's analysis and computing abilities and will expose him to new challenges (in particular L1 triggering, FPGA programming and hardware) that will substantially broaden his scientific spectrum. The fellowship would thus significantly increase his chances for obtaining a position of professional maturity.

WEAKNESSES

- The fellow lacks talks at renowned international conferences. The long list of conference and workshop participations contains mainly national or ATLAS events.
- The proposal does not present convincing evidence for leadership qualities, nor for teaching or supervising experience.

Overall score (Threshold: 4.00/5.00, Weight: 0.25) 4.30

Criterion 4. IMPLEMENTATION (selection)

Issues to be addressed when assigning an overall mark for this criterion:

- Quality of infrastructure / facilities and International collaborations of host
- Practical arrangements for the implementation and management of the research project*
- Feasibility and credibility of the project, including work plan
- Practical and administrative arrangements, and support for the hosting of the fellow*

Please use the following structure in your comments to this criterion:

- Strengths of the proposal (bullet point structure):
- Weaknesses of the proposal (bullet point structure):
- Overall comments:

(reflecting the relative importance of the strengths and weaknesses above mentioned)

(copy the text above in the comment box)

STRENGTHS

- + The host is an internationally highly renowned institute with a very helpful proximity to CERN. The applicant will benefit friom the many international collaborations of the host and from its long-standing tradition in hosting international researchers.
- + The project as such (i.e. the tracking trigger) has been proven to be feasible at TeVatron. An extrapolation to LHC is credible.

WEAKNESSES

- The implementation of the specific work program of the fellow, including the exact tasks he will perform, is not described in sufficient clarity to judge its feasibility and credibility. In particular, there is no mention of the task distribution in the FTK collaboration and the collaborative network in which the fellow will be embedded.
- The proposal does not accurately describe the infrastructure present at the host institute that could help to develop the project. The local contact at CERN is not mentioned, nor the collaboration between CERN and the host groups.
- The section on "Practical and administrative arrangements, and support for the hosting of the fellow" fails to relate concretely to the fellowship. Also the management of the project is described in insufficient detail.

Overall score 3.50

Criterion 5. IMPACT (award)

Issues to be addressed when assigning an overall mark for this criterion:

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- Impact of competencies acquired during the fellowship on the future career prospects of the researcher, in particular through exposure to transferable skills training with special attention to exposure to the industry sector, where appropriate*
- Contribution to career development or re-establishment where relevant*
- Benefit of the mobility to the European Research Area
- Development of lasting cooperation and collaborations with other countries
- Contribution to European excellence and European competitiveness regarding the expected research results
- Impact of the proposed outreach activities*

Please use the following structure in your comments to this criterion:

- Strengths of the proposal (bullet point structure):
- Weaknesses of the proposal (bullet point structure):
- Overall comments:

(reflecting the relative importance of the strengths and weaknesses above mentioned)

(copy the text above in the comment box)

STRENGTHS

- + The trigger if successfully constructed and operated will significantly enhance the physics potential of LHC and thus strongly contribute to the progress of particle physics and the success of the world's largest and most advanced particle physics laboratory. Clearly, this is a major contribution to European excellence and European competitiveness.
- + The fellow will acquire additional knowledge and will surely profit from the fellowship in his career development.
- + The project promises to build on the existing international collaborations with institutes from many other countries.

WEAKNESSES

- It is not convincingly demonstrated that the candidate will have a good opportunity to reach a position of professional maturity.
- The section on "Benefit of the mobility to the European Research Area" fails to address the benefit of the project to Europe. In fact, the researcher has been working at CERN for the past eight months, which may reduce the impact of the fellowship on his mobility.
- The section on outreach focuses on dissemination of scientific/technical issues inside the research community. Public outreach is only mentioned briefly, in a very general way and without reference to the fellow.

Overall score (Threshold: 3.50/5.00, Weight: 0.20) 4.10

*Sub-criteria to be evaluated in the light of the principles of the 'European Charter for Researchers' and the 'Code of Conduct for the Recruitment of Researchers'.

**Any leave of absence in the research career of more than one year such as maternity/parental leave, sick or family care leave, military service, humanitarian aid work, etc. will be taken into account.

RECOMMENDATIONS FOR NEGOTIATION AND/OR INDICATORS TO MONITOR PROGRESS OF PROJECT:

Substantiate outreach activities

TOTAL SCORE

Total score (Threshold: 70.00/100.00, Weight: 1.00) 79.90

Does this proposal raise ethical issues?

No

Other Issues

Do you believe that the applicant has more than ten years of research experience?

No