Application from	**Whitehead, Mark**
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Job	Fellowship and GET Programmes / Programme des Boursiers et GET / AFC-2015-1/FELL
Document Type	Application Form
Application date	02/03/2015 10:37

Personal Details

Title	Doctor
Family Name	Whitehead
First Name(s)	Mark
Maiden Name (if applicable)	
Gender	Male / Homme
Date of birth	11/08/1986
Nationality	British (GB)
Second Nationality (if applicable)	
Country of Birth	UNITED KINGDOM
Town of Birth	Maidstone
Home Address (line 1 - max 32 chars)	20 Bridge Street
Home Address (line 2 - max 32 chars)	
City	Kenilworth
Country	UNITED KINGDOM
Postal Code	CV8 1BP
Landline Phone Number (with international prefix)	
Mobile Phone Number (with international prefix)	+447521088165
What is your mother tongue?	English
Please rate your level of English	English is my mother tongue
Please rate your level of French	A1
Please select any other languages you may speak	

Education

Country	UNITED KINGDOM
Level of Education	UNITED KINGDOM - PhD
Title of Diploma/Qualification Note: Please give the full title in their original language (using Latin characters)	PhD in Experimental Particle Physics on LHCb
Attended From	10/2008
Attended To (planned end date for current studies)	08/2012
School/University Name	University of Warwick

Country	UNITED KINGDOM

Level of Education	UNITED KINGDOM - Master
Title of Diploma/Qualification **Note: Please give the full title in their original language (using Latin characters)**	Master of Physics Degree - First class with honours
Attended From	10/2004
Attended To (planned end date for current studies)	06/2008
School/University Name	University of Warwick

Employment

Date from	04/2012
Date to	10/2015
Name of your Employer	University of Warwick
Country	UNITED KINGDOM
Title of your Position	Research Associate
Job Description	Post doctoral position on the LHCb experiment funded by the ERC. Measurements of CP violation using the LHCb detector. I work with several students on data analysis. Please see my CV for more details of my research activities.

Specific Information (Fellows)

When would you like to start working at CERN?	10/2015
What is your motivation for applying for this job?	As an experimental particle physicist working on one of the LHC experiments there is no better place in the world to work at than CERN. As the home of the LHC, there is a such a concentration of expertise that I would like to opportunity to learn from. This year should prove to be very exciting, with the LHC due to start running close to its design energy, I would consider myself very fortunate to be able to experience this first hand. If signs of new physics are to be seen during run 2 it could well be seen first by the LHCb experiment, rather than through the direct searches from ATLAS and CMS. I hope to build a career as a particle physics researcher, and after three years experience as a research associate I believe I am ready to further myself as a CERN fellow. If I were to be selected as a CERN fellow I would be able to start working in October 2015 and would prefer to work on LHCb.
Have you ever worked at CERN before?	No
If you selected "Yes - as a Fellow", please indicate for how long have you been a Fellow (in months)?	
Do you wish to also be considered for a COFUND Fellowship?	Yes
Main field of study	Experimental Physics / Physique Expérimentale
Please indicate for which type of Fellowship you wish to be considered	Research (Experimental physics)
Secondary field of study	
Tertiary field of study	
Applied physics	

Describe the projects where you used the selected applied physics topics and/or any others that are not listed	
Architecture	
Describe the projects where you used the selected architecture topics and/or any others that are not listed	
Surveying	
Describe the projects where you used the selected surveying topics and/or any others that are not listed	
Chemistry	
Describe the projects where you used the selected chemistry topics and/or any others that are not listed	
Civil engineering	
Describe the projects where you used the selected civil engineering topics and/or any others that are not listed	
Programming Languages	
Describe the projects where you used the selected programming languages and/or any others that are not listed	
Databases	
Describe the projects where you used the selected databases and/or any others that are not listed	
Information Technologies	
Describe the projects where you used the selected information technologies and/or any others that are not listed	
Theory of electrical engineering	
Describe the projects where you used the selected theory of electrical engineering topics and/or any others that are not listed	
Networks and systems	
Describe the projects where you used the selected networks and systems and/or any others that are not listed	
Low and high frequency engineering	
Describe the projects where you used the selected low and high frequency engineering topics and/or any others that are not listed	
Experimental Physics	Data reduction and numerical analysis Physics simulation
Describe the projects where you used the selected experimental physics topics and/or any others that are not listed	I have been involved directly in approximately 7 physics analyses, which all require data samples to be reduced, selected and purified into the final samples used to perform a fit. I have experience of performing branching fraction measurements and full amplitude analyses. On the simulation side, I have been involved with the EvtGen package. My role was to perform maintenance of the LHCb specific version of the package. For more details of my areas of expertise please see my CV.
Materials and experimental techniques	

Describe the projects where you used the selected materials and experimental techniques and/or any others that are not listed	
Mathematics	
Describe the projects where you used the selected mathematics knowledge and/or any others that are not listed	
Mechanical engineering	
Describe the projects where you used the selected mechanical engineering topics and/or any others that are not listed	
Safety	
Describe the projects where you used the selected safety topics and/or any others that are not listed	
List of (up to 5) most important publications in refereed scientific journals: reference, title. In each case summarize in 2 lines maximum your personal contribution.	Please see my CV for a list of publications, including my contribution to each paper.
Are you a PhD holder or PhD student?	Yes / Oui
Specify submission date, defence date, title of thesis and name of your supervisor; summarize your thesis in maximum 5 lines; give the most significant results obtained.	Title: Observation of the decay B0 -> D0K+K- with the LHCb detector at CERN. Submitted: June 2012 Defended: August 2012 Supervisor: Prof. Tim Gershon The thesis documents the first observation of the decay B0 -> D0K+K- and the first evidence for the Bs0 -> D0K+K- decay. The branching fractions of the two decay modes were measured with respect to a normalisation channel, B0 -> D0pi+pi-. This analysis provided a template for several future publications, including the usage of NeuroBayes trained exclusively on data to remove combinatorial backgrounds.
List up to 3 experiments that you have participated in. In each case summarize in 2 lines your main contribution (other than your PhD)	I have only worked on LHCb
Optionally: List of up to 5 public or internal notes to which you have contributed personally. Indicate the number of authors.	Vertex Locator Simulated Material Description, LHCb-INT-2010-054. This note documents the work I performed as a Ph.D. student to improve the description of the VELO detector in the LHCb detector description database. I am the main author of the note, supported by two others.
List of (up to 5) presentations at international Conferences (specify talk or poster) or workshops: conference name, date, title of the talk	Please see my CV for a list of conference talks and information about proceedings.
Statement of Research Interest (max 15 lines)	Please see my CV for a description of my research interests.
Additional comments	
Y	