

Adam Morris

Curriculum Vitae

Personal statement

I am a PhD student with the LHCb group at the University of Edinburgh. My research experience is in studies of four-body charmless hadronic decays of B mesons.

Education

PhD in experimental particle physics 2013 — 2017
University of Edinburgh

Thesis title *Measurements of charmless B_s meson decays at LHCb*
Supervisors Matthew Needham and Franz Muheim

MSci in Physics 2009 — 2013
University of Birmingham

Thesis title *A possible lepton flavour violation search at NA62*
Supervisors Cristina Lazzeroni and Evgueni Goudzovski
Classification 2:1

Physics analysis activities

Amplitude analysis of $B_s^0 \rightarrow \phi K^+ K^-$ decays 2015 — 2017
Measurement of the $B_s^0 \rightarrow \phi\phi$ branching fraction and search for $B^0 \rightarrow \phi\phi$ 2014 — 2015
Measurement of CP violation in $B_s^0 \rightarrow \phi\phi$ decays 2013 — 2014

Hardware and operations activities

LHCb control room shifts 2015 — 2016
RICH piquet shifts 2015 — 2016
Ion feedback monitoring of the RICH HPDs 2015 — 2016
RICH upgrade testbeam 2014 — 2016
Performance of MaPMTs in magnetic fields for the RICH upgrade 2013 — 2014

Schools, workshops and conferences

Exotic hadron spectroscopy workshop University of Edinburgh, September 2016
Heavy Quarks and Leptons (HQL) conference Virginia Tech, May 2016
Talk: *Charmless b -meson and b -baryon decays at LHCb*
LHCC Poster Session CERN, March 2016
Poster: *Measurement of the $B_s \rightarrow \phi\phi$ branching fraction and angular analysis of $B_s \rightarrow \phi\pi^+\pi^-$ at LHCb*
UK HEP forum: “Anomalies and Deviations” workshop STFC, Abingdon, November 2015
Poster: *Measurement of the $B_s \rightarrow \phi\phi$ branching fraction and search for $B^0 \rightarrow \phi\phi$ at LHCb*

European School of High-Energy Physics

Bansko, Bulgaria, September 2015

Young Experimentalists and Theorists Institute (YETI) workshop

Durham University, January 2015

B-physics at frontier machines (Beauty) conference

University of Edinburgh, July 2014

Poster: *Measurement of CP violation in $B_s^0 \rightarrow \phi\phi$ decays*

STFC HEP summer school

University of Warwick, September 2014

Public outreach

Participant in an 'Ask Me Anything' session organised by the CERN Press Office on *reddit.com*

May 2015

Participant in a *Speed Science* event at the *Glasgow Science Festival*

June 2014

Demonstrator at the *Discovering the Higgs Boson* exhibit at the *Big Bang Fair*, Birmingham NEC

March 2014

Skills

- Data analysis techniques, including multivariate selection, maximum-likelihood fitting, amplitude analysis and limit-setting
- Proficiency with C, C++, Python and shell scripting
- Experience with ROOT (incl. TMVA, RooFit and RooStats), GSL, Boost and the LHCb software (incl. Gauss and DaVinci)
- Experience using parallel computing resources, such the Edinburgh and CERN batch services and the LHC Grid (via DIRAC and Ganga)
- Experience with collaborative software development and version control systems (Git and SVN)

Publications