

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

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