

Portrait

*Uni Heidelberg, MPIK
and Rostock groups*



Jahrestreffen der deutschen LHCb-Gruppen
(Theorie und Experiment)

7-8 October 2021
Dortmund



Physikalisches Institut
Uni Heidelberg



**Prof Dr Stephanie
Hansmann-Menzemer**
RTA Deputy Leader



Prof Dr Ulrich Uwer
SciFi Project Leader



Physikalisches Institut
Uni Heidelberg

The SciFi Team



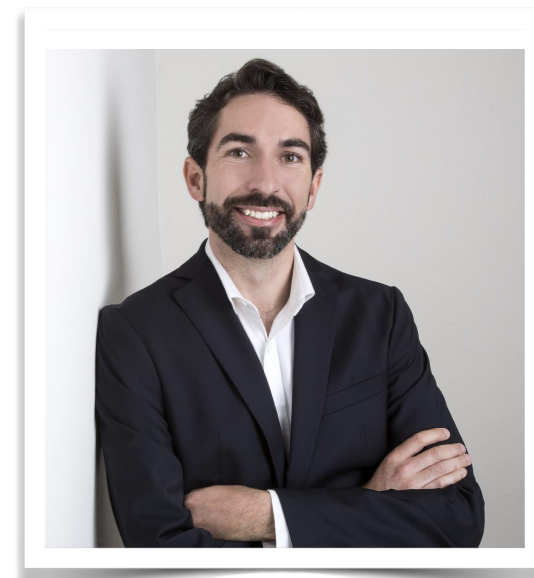
**Dr Sebastian
Bachmann**
Module assembly & QA



**Dr Bernd Windelband
& Daniel Sigmund**
C-frame engineering



Dr Xiaoxue Han
Front-End electronics,
electronics coordinator



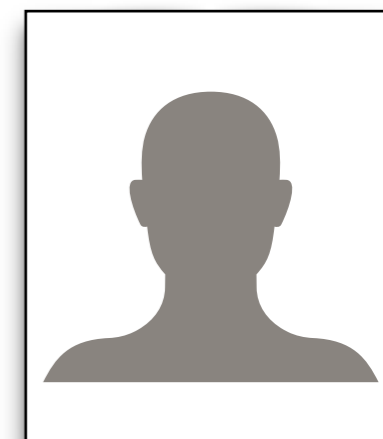
Dr Blake Leverington
Assembly Coordinator,
Software Liaison



Lukas Witola, Daniel Berninghoff & Chishuai Wang
Front-End Electronics commissioning



Daniel Unverzagt
Optical Fibres



Benedict Maisano
Digital SiPM studies



Physikalisches Institut
Uni Heidelberg

Electroweak penguins



Dr Martino Borsato
Electroweak penguin convener
 $b \rightarrow s\ell\ell$ angular and LFU



Renata Kopecná
 $B^+ \rightarrow K^{*+}(\rightarrow K^+\pi^0)\mu^+\mu^-$
angular analysis



Miguel Ruiz Diaz
LFU in $B \rightarrow K^*\ell\ell$



Dr Flavio Archilli & Chishuai Wang
LFUV in $\Lambda_b \rightarrow \Lambda\ell\ell$



Jiangqiao Hu & Fabian Glaser
 $B^0 \rightarrow K^*e^+e^-$ angular analysis



Very rare and exotics



Dr Flavio Archilli

$B \rightarrow \mu\mu, \tau \rightarrow \mu\mu\mu$
LFV decays



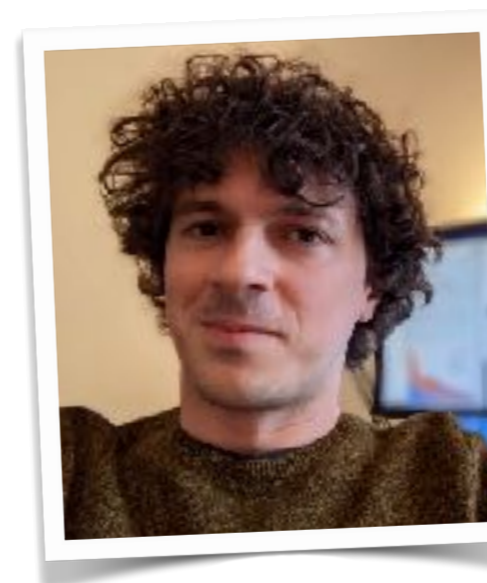
Daniel Unverzagt

Search for $D \rightarrow hh\mu e$



**Giulia Frau &
Rowina Caspary**

Search for $\tau \rightarrow \mu\mu\mu$



Dr Martino Borsato & Maurice Morgenthaler
Heavy neutrinos from B decays



Physikalisches Institut
Uni Heidelberg



Jascha Grabowski

Exotics search in
 $B \rightarrow \psi(2S)\pi\pi$



Dr Peilian Li

ϕ_s measurement



Dr Jörg Marks & Dr Alexey Zhelezov

Core computing, grid computing



Tracking and Real Time Analysis



Dr Peilian Li
Run 3 tracking and
early measurements



Giulia Frau & Rowina Caspary
Tracking efficiency and selection



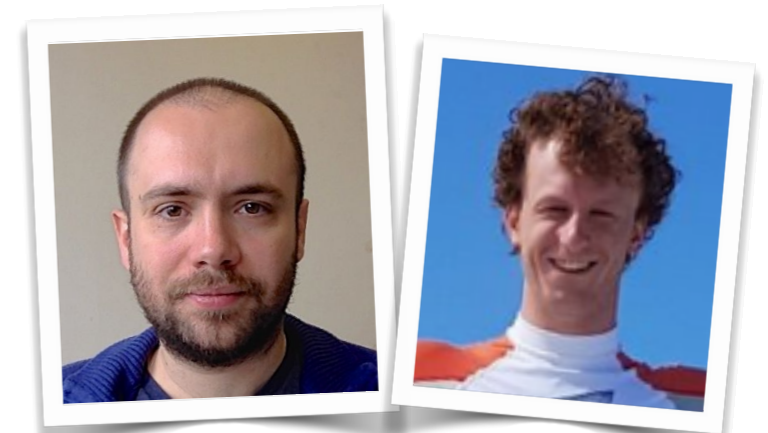
Andre Günther
Early measurement of
charm production



Andre Günther & Jakub Kubát
Tracking reconstruction and fit



Paula Herrero Gascón
Lifetime bias studies



Dr Flavio Archilli & Raphael Skuza
Tracking calibration and alignment



Prof Dr Michael Schmelling (group leader)

- test of CPT-symmetry in $\Lambda - \bar{\Lambda}$ mass difference
- inclusive cross-section analysis (pp, pPb, ...)
(in collaboration with TU-Dortmund)
- links between particle- and hadronic-interaction models used in cosmic ray physics (with Alvaro Pastor (HD) on the cosmic ray side)



Dr Mikhail Zavertiaev (senior, guest researcher)

- analysis of low-pileup data at 7 and 13 TeV

Outreach activities:

development of a PIN-diode based cosmic-ray muon detector based on work by Hednrik Borrás, Swathy Ramakrishnan and Priyanka Kesavadas



Prof Dr Roland Waldi

- LHCb Emeritus