



RSE(s) in Elementary Particle Physics Group

Ben Morgan



WARWICK
THE UNIVERSITY OF WARWICK

<https://warwick.ac.uk/fac/sci/physics/research/epp/>

- *We're not RSEs in the strict sense, or even job title, but spend most of our time on development of collaboration/experiment/community software*
- **Ben Morgan**
 - [Geant4 C++/Python detector simulation toolkit](#), R&D on use of HPC/GPU for detector simulation. Build/CI/Packaging with CMake, Spack, etc.
- **Tom Latham, John Back, Fernando Abudinén, Michal Kreps**
 - C/C++ [EvtGen](#), [Laura++](#), event generator packages, [MWAPP](#) w/Monash
- **Andy Chappell, Maria Brunetti, John Marshall**
 - [C++ Pandora toolkit](#) for event reconstruction, R&D on ML techniques
- Training activities
 - [Warwick/Birmingham/Bristol C++ Course as part of MPAGS](#)
 - EPP Academics take [Year 1](#) and [Year 2](#) undergraduate courses (Python)

Ideas/Thoughts on RSE Development at Warwick

- Knowledge exchange/sharing - “I need to use X, and know there’s a colleague at Warwick with expertise I can ask about it”, or “that’s a useful new package/tool I didn’t know about before”, or “that meeting/conference looks interesting”
 - *Not sure how best to achieve that, but can discuss today*
- Training, training, training?
 - *How can we contribute across the University (commonalities vs research field specificities), wider UK (e.g. ExCALIBUR, SWIFT-HEP). Even internationally, e.g. community/field efforts like the [HEP Software Foundation](#)*
 - *Training for RSEs themselves, e.g. more advanced topics.*