Hardware

- **GooFit tests so far:**
  - **Cerberus: C2050 (Tesla, 2.0) - speedup for mixing fit ∼300.**
  - **Oakley: C2070 (Tesla, 2.0) - same speedup.**
  - **Starscream: 650M (Kepler, 3.0) - speedup ∼80.**
  - **MacBook: 650M - problems!**
  - **Kepler test bench: K20x - speedup ∼450.**
- **Quick Amazon check: C2050 ∼$2000, K20 ∼$4000, 650M (with laptop attached) ∼$1500.**
- **TO run GooFit you need compute capability at least 2.0.**
- **For laptops, GeForce 600 series looks like the 'canonical' offering. Possibly as cheap as 100 dollars?**
- **For desktops, Tesla cards. Needs a few thousand.**
- **Note: Amazon will rent you time on a farm with modern GPU access for a few dollars an hour!**

GooFit TODOs

- **Much improvement to be done!**
- **Full support for multiple GPUs**
- **Improve the normalisation paradigm**
- **RooFit and ROOT bindings**
- **GitHub repository**
- **Understand `float/double` issues**
- **Documentation**
- **Fix `modelOffset`**
- **Rename `PdfFunctor` class; prefix everything with `Goo`!**

Discussion suggestions

- **Floats and doubles - how important is the last-ten-iterations accuracy?**
- **Integrated GPUs.**
- **Hardware or software implementation?**
- **Access to GPU farms.**
- **Should the CERN experiments acquire some GPUs? Individual institutions?**