

Ideas for a journal around

"Computing and Software for data-intensive physics"

... First ideas: Inform you at a very early stage

... Get input (and maybe participation) for further directions

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Why a place for publications?

- > Lots of innovation and work carried out in HEP and other fields of data-intensive physics
- > Some of it has academic value
- > Academic value is measured in ... Publications

- > Innovation in data-intensive physics often is “too practical“ for classical computer science journals
- > Hard to place articles in existing journals for, well, *our* people.
- > Need for something like „our“ journal

- > Would further foster information exchange in our field
- > Would make our field more attractive for young people with academic ambitions



For whom to publish?

- > Current focus is on „data-intensive physics“, „Collaborative ... large-scale physics experiments“
- > Clearly nuclear, particle and astroparticle physics as well as observational cosmology
- > Clearly also some photon science facilities: Petra-3, XFEL, ..., well, any current or future high-brilliance light source
- > ... With a *triple focus* on
 - large collaborations
 - data intensive research
 - connected to physics.
- > People from universities and research institutes could publish in a peer-reviewed journal



Which topics? Current tentative scope:

- > **infrastructures** for large-scale, high-throughput computing
- > related **software** and development Infrastructure
- > **middleware** development
- > data **processing, hosting and sharing**
- > novel **algorithms** for efficient data reconstruction and filtering
- > software **Benchmarking** and Performance Assessment
- > **frameworks** and software integration
- > Online/Offline **data quality** monitoring
- > Distributed **data analysis**
- > **Deep learning** algorithms
- > Event and object **classification**
- > Data **Visualization**



Comparison to other HEP computing related events?

> Well, of course there is HEPiX:

- Many aims of HEPiX are common to the journal
- However, HEPiX lacks the “journal part“. While innovation presented to HEPiX or around HEPiX is well recognized *within* our field, academic recognition *outside* our field is missing – let alone that there are no proceedings, only presentation slides

> CHEP and ACAT?

- Well established and important conferences.
- Conference proceedings often have a lower academic recognition than peer-reviewed journal publications.
- Frequency is too low for e.g. Master and PhD student work.

> A new journal would complement the existing landscape

- Cross-fertilisation ... E.g. Selected HEPiX presentation repeated into journal article ?



Who is behind?

- > The initiators are
- > Christian Caron (Springer)
 - Publishing editor of e.g. EPJC
 - Sitting somewhere in the audience
- > Guenter Quast (KIT)
 - Physicist working on CMS analysis and CMS/HEP/Grid computing

- > Some early discussions with computing experts in Germany and CERN
 - Some resource provider
 - Some experiment software people
 - Some VO computing experts



Status

- > Discussion with small group of experts
- > Presenting first ideas
- > Seek input and comments

- > Anyone wants to participate?

