



LUND
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The New MCnet

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What is MCnet?

A network/collaboration to:

- ▶ *“Facilitate collaboration and sharing of expertise between widely-used general purpose MCEGs and associated tools.*
- ▶ *Facilitate training and career progression for those working in the areas of MCEGs and associated tools*
- ▶ *Where appropriate, provide support and coordination for funding applications for individual or collaborative projects within the area*
- ▶ *Serve as a point of contact to MCEG community, e.g., for experimental collaborations or conference organisers, provide a platform to form and express coordinated voice from MCEG developers”*

MCEG = Monte Carlo Event Generators, capable of simulating the full final state of particle interactions



What is MCnet?

- ▶ 2007–2010 MCnet RTN (FP6, MCA)
- ▶ 2012–2016 MCnet ITN (FP7, MSCA)
- ▶ 2017–2021 MCnet ITN3 (H2020, MSCA)

In 2021 we applied again for a similar scheme, but was turned down.

In 2022 we did not apply.

Where are we in the absence of funding?



Who is MCnet?

Manchester, Durham, Göttingen, Glasgow, Karlsruhe, Louvain, Lund, UCL, Vienna, Graz, CERN, Heidelberg, Monash, Dresden, Edinburgh, Fermilab, Kennesaw State.

Contur, HEJ, Herwig, MadGraph, Professor, Pythia, Rivet, Sherpa, . . .



What did we do?

- ▶ PhD studentships (~ 25)
- ▶ Network meetings (this is the 25th)
- ▶ MCnet summer schools (17)
- ▶ Short-term students ($\lesssim 100$)

And, of course, developed Herwig, Pythia, Sherpa, MadGraph, Rivet, Professor, HEJ, Contur, ...



Is that all?

We also came together as a community, and created a brand that raised the level of awareness of the fundamental importance of event generators in HEP.

We wrote reviews, policy documents, white-papers, developed standards, . . .



What is MCnet without funding?

- ▶ We are still a network
- ▶ We are still arranging schools (18th in Durham in July)
- ▶ We still have PhD students (locally funded)
- ▶ We still have a student & postdoc committee
- ▶ We still arrange Journal Clubs
- ▶ We could still have (zoom-based) short-term students
- ▶ ...

[Durham school: <https://conference.ippp.dur.ac.uk/event/1179/>]



The MCnet Collaboration

A collaboration agreement was formulated in December 2021

There is a collaboration board

There is a student and postdoc committee

There is a new web page (montecarlonet.org)

And a twitter account! @hepmcnet



The collaboration board

Consists of

- ▶ representatives from each project,
- ▶ representatives from each institute,
- ▶ representatives from the student & postdoc committee,
- ▶ a chair and co-chair (LL and Steffen Schumann)

Would like to have contact persons in (major) experimental collaborations.



The collaboration board

- ▶ decide/plan meetings, schools, and training activities
- ▶ discuss and coordinate funding applications
- ▶ decide on new member projects and member institutes
- ▶ coordinate response to questions/requests from the wider community
- ▶ ...



MCnet relation to LPCC

LPCC will support some MCnet activities at CERN

- ▶ Access to CERN computing infrastructure
- ▶ Network meetings @CERN
- ▶ MCnet summer school @CERN



An open Monte Carlo Network

“Individual membership continues from the membership of the current MCnetITN3 [. . .] Members may be added by their own existing MCnet institute or project by informing the Collaboration Board.

Institutional membership continues from the membership of the current MCnetITN3 [. . .] Institutes or projects may join MCnet by application to the Collaboration Board.”

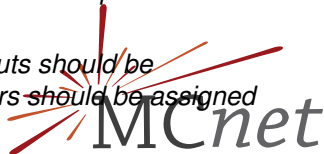


An open MCnet

- ▶ Our meetings will be open
- ▶ Our schools will be open
- ▶ Membership is open (but not unconditional)



- ▶ *“Active, regular engagement with MCnet activities is expected*
- ▶ *Code intended for general use should be Open Source and should respect the MCnet guidelines for Event Generator Authors and Users*
- ▶ *Open standards should be developed and respected where appropriate and as far as possible*
- ▶ *The CB should be informed in advance of funding applications or other activities in which MCnet is expected to play a role, and have the opportunity to comment*
- ▶ *Training opportunities should be shared where possible*
- ▶ *Collegiate, collaborative and inclusive conduct is expected at all times*
- ▶ *The role and contribution of MCnet to outputs should be acknowledged, and MCnet preprint numbers should be assigned to publications where appropriate.”*



Sign up for our mailing list: `mcnet-info@cern.ch`

See also `montecarlonet.org`

Thanks for listening!

