Coordinator's Report: Training Progress Report

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Training activities

- PhD studentships
  11 students hired in academic year 17/18
  enrolled in university PhD programmes
- Short-term studentships
  placings in research and outreach projects
- Annual and topical schools
  Lund 2017 and Prato 2018, Göttingen 2018
- Bi-annual network meetings
- Entrepreneurship and employability
  industry secondments, training events

PhD studentships

Research projects in MC generator physics, development and application

- 11 international students: 8 male, 3 female (France, UK, Ireland, Germany (2), Spain, China, India, Italy, Norway, Canada)
- 36 months contracts with host universities
- main objective: complete PhD in 3-4 years
- first research results presented & published
- offer academic and industry secondments

next generation of MC developers

Short-term studentships

3-6 months training opportunities

- open to network and external students
- student exchange between network nodes
- widely advertised in the broader community
- train experimentalists and theorists
- awarded 33 months: 3 posts completed, 1 in progress, 3 to start in spring 2019
- secondments for network ESRs, so far 1 academic and 1 with industry partner (B12)

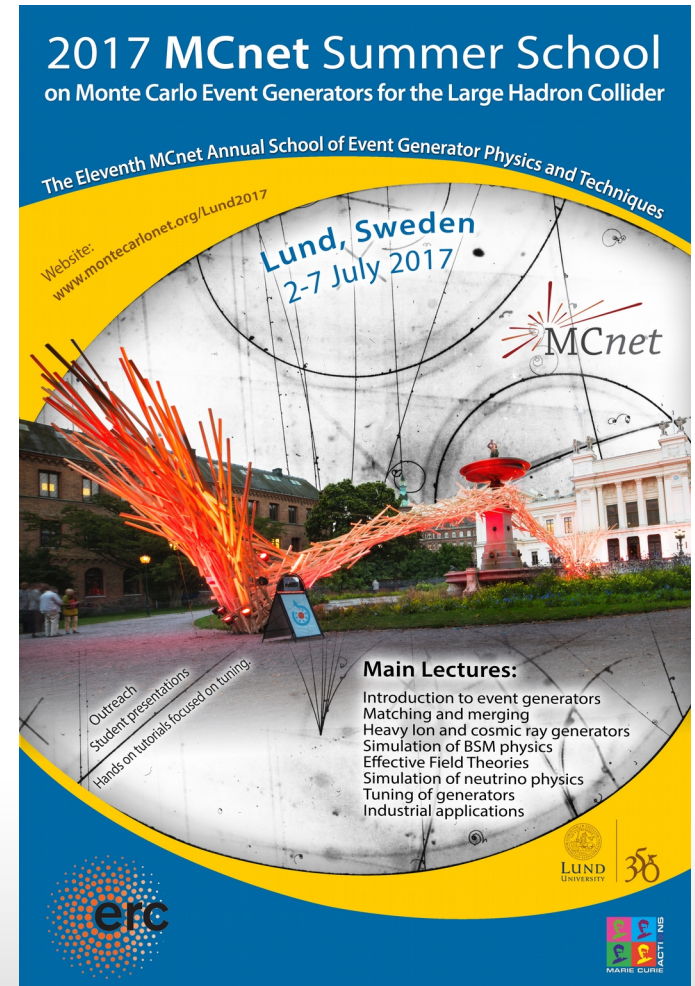inter-project collaboration, expert-user training

Annual schools
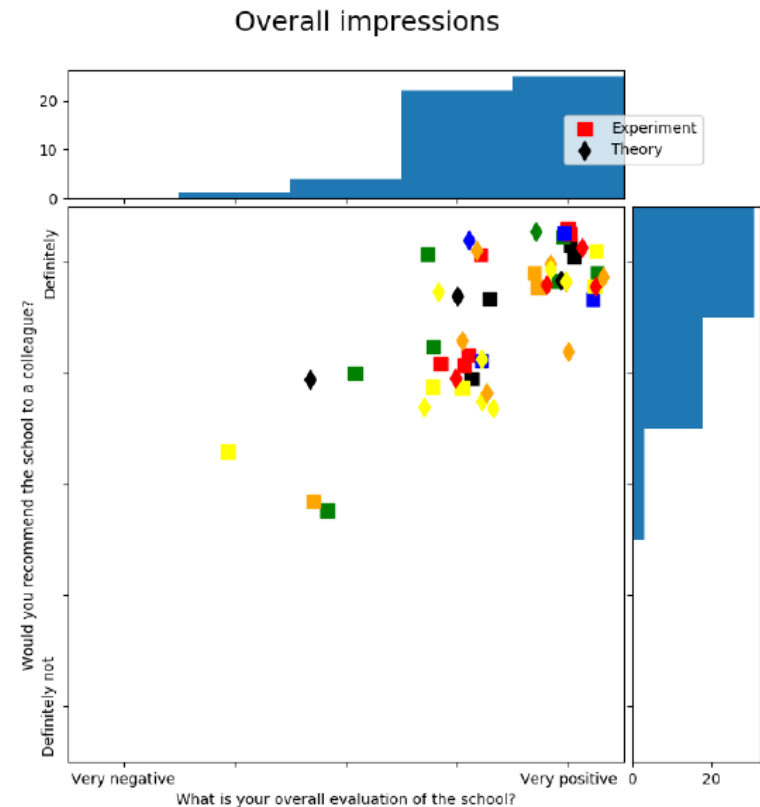
Key activity in developer and user training

- held annually, hosted by specific node
- 5 days of introductory and specialised lectures, industry lecture, hands-on sessions, generator tutorials, evening discussions
- involve MCnet alumni as lecturers & tutors
- export format outside Europe (Vietnam 2019)

cohort building, scientific outreach to community

Annual schools

2017 Lund/Sweden

- 11th MCnet school
- 61 participants, incl. 3 prospective ESRs and 3 short-term students, 12 non-appointed node members
- 11 MCnet academics

2017 **MCnet** Summer School
on Monte Carlo Event Generators for the Large Hadron Collider

The Eleventh MCnet Annual School of Event Generator Physics and Techniques

Website: www.montecarlonet.org/Lund2017

Lund, Sweden
2-7 July 2017

MCnet

Outreach
Student presentations
Hands on tutorials focused on tuning.

Main Lectures:
Introduction to event generators
Matching and merging
Heavy Ion and cosmic ray generators
Simulation of BSM physics
Effective Field Theories
Simulation of neutrino physics
Tuning of generators
Industrial applications

Lund school feedback
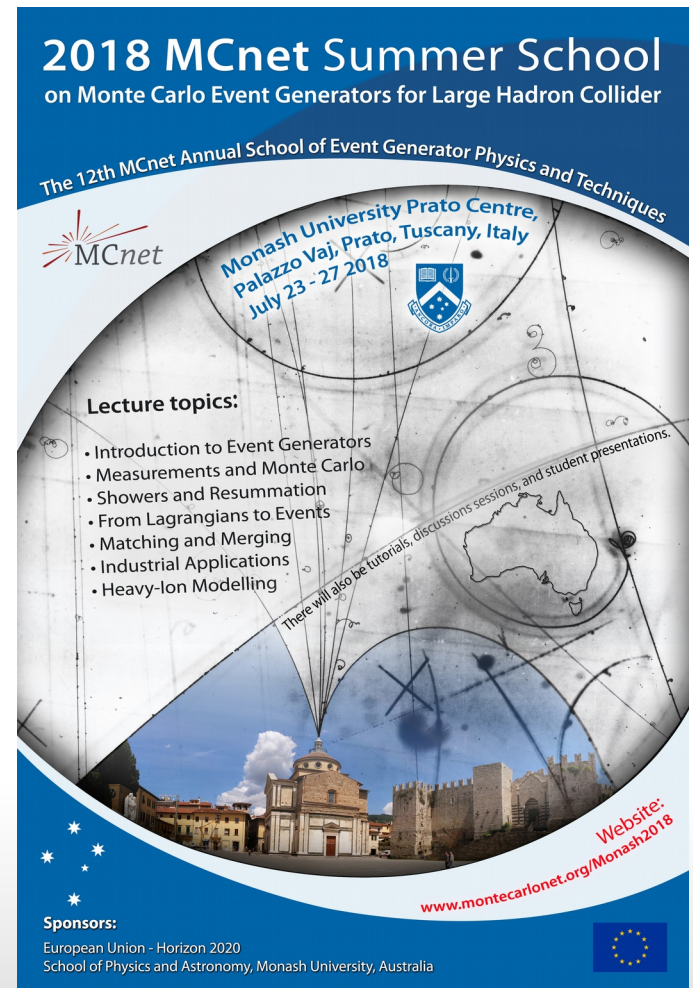
Participants

Overall impressions

Annual schools

2018 Prato/Italy

- run by Monash at their centre in Prato/Tuscany
- 46 participants, incl. 10 ESRs and 2 shorties
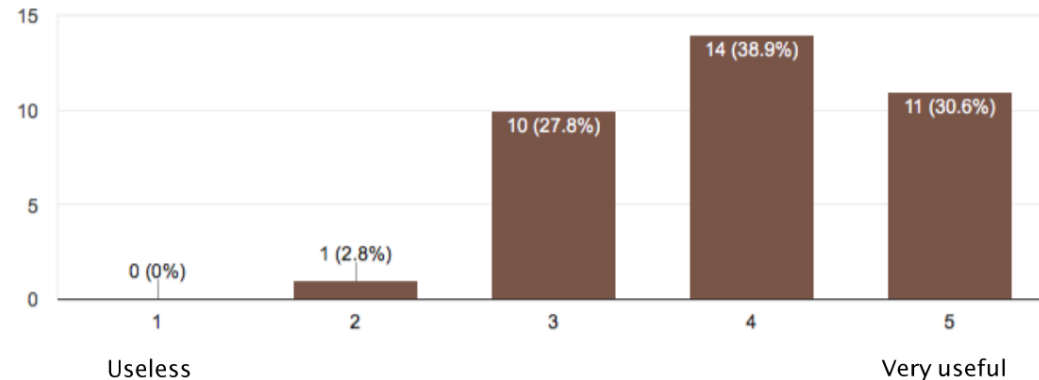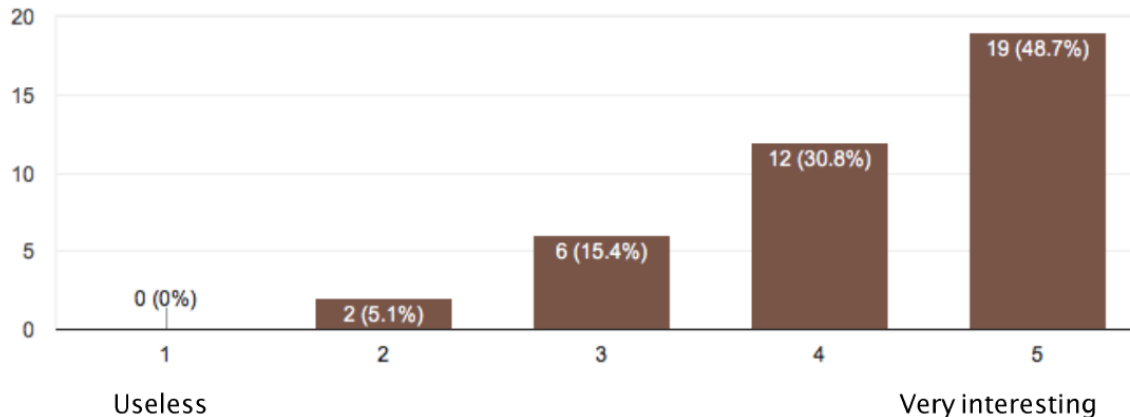- 7 MCnet academics
- tutorials on heavy ion collisions

2018 MCnet Summer School
on Monte Carlo Event Generators for Large Hadron Collider

The 12th MCnet Annual School of Event Generator Physics and Techniques

MCnet

Monash University Prato Centre, Palazzo Vaj, Prato, Tuscany, Italy
July 23 - 27 2018

Lecture topics:

- Introduction to Event Generators
- Measurements and Monte Carlo
- Showers and Resummation
- From Lagrangians to Events
- Matching and Merging
- Industrial Applications
- Heavy-Ion Modelling

There will also be tutorials, discussions sessions, and student presentations.

Website:
www.montecarlonet.org/Monash2018

Sponsors:
European Union - Horizon 2020
School of Physics and Astronomy, Monash University, Australia

MCnet Prato school feedback

What are your impressions from the second tutorial session, on heavy ion event generation?

36 responses

Useless ← → Very useful

Values: 1: 0 (0%), 2: 1 (2.8%), 3: 10 (27.8%), 4: 14 (38.9%), 5: 11 (30.6%)

What is your impressions of the evening sessions?

39 responses

Useless ← → Very interesting

Values: 1: 0 (0%), 2: 2 (5.1%), 3: 6 (15.4%), 4: 12 (30.8%), 5: 19 (48.7%)

24th January 2019, MTR

Topical schools

September 2018 Göttingen

- 5d School on Scientific Computing: interactive lectures on OO, continuous integration, APIs, parallel computing, ... coding projects in teams of 4
- 19 participants
  incl. 10 MCnetITN3 ESRs
- 6 lecturers/tutors

Network meetings

Bi-annual meetings of the entire network

- CERN and KIT 2017, CERN 2018, Louvain-la-Neuve Jan. 2019
- student and postdoc sessions organised by student committee: status talks, topical discussions, inter-generator aspects
- involve industry partners
- combine with specific training events
  CERN '18: 2 days on scientific presentations

Training events

CERN 2018: Scientific presentations

Pre-course
  prepare draft presentation, access to training materials and advice

Day 1 - Design Presentation Content
  structure, concise messages, presenting data, visual aids

Review draft presentation

Day 2 - Delivering Presentations
  style, engage audience, presentation practice - feedback from trainers, academics and fellows

Summary

Large variety of training opportunities

- 10(+1) ESRs enrolled in PhD programmes
- annual and topical schools
reviewed and adjusted based on feedback
involve industry partners and MCnet alumni
- short-term studentships and secondments
involves all nodes, academic & industry partners
- employability events
- bi-annual network meetings