High level summary for the RDA IG Education and Training on handling of research data

CODATA/RDA WG Summer School on Research Data Science for Low and Middle Income Countries

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The Past
#DataTrieste 2016 by the numbers

- August 1-12, 2016
- Trieste, Italy - Abdus Salam International Center for Theoretical Physics
- 70 Students from 35 Countries (320 Applicants)
- 16 Instructors from 12 Institutions
Curriculum

- Open Science - challenges and opportunities
- Research Data Management
- Author Carpentry - best practices for 21st century scientific publishing
- Automation of repetitive tasks in Linux Bash
- Data analysis in R
- Principles of visual data analysis
- Data visualisation in R
- Databases and SQL
- Version control and collaboration with git and GitHub
- Machine learning and recommender systems in R
- Neural networks
“The CODATA-RDA Summer School was of tremendous value to me, not only as a researcher, but also as a person. I sharpened some skills that I have learned previously and learned many new tools/skills. Some of the lessons were a bit too advanced for me, but it served as an eye-opener and made me realize how powerful the tools are. Needless to say, this sparked my curiosity and ever since then I just want to learn more about the tools and show it to other people. I qualified as a Software and Data Carpentry instructor soon after the Summer School and ran a Genomics Data Carpentry Workshop at my institution (North-West University, Potchefstroom). We are planning on running several workshops throughout the year. As for the personal value that I gained from the Summer School, I have much more confidence in my skills and am much more involved in the communities. Of course I also developed precious friendships, with the possibility of future collaborations. If I could summarize it in two words: overwhelmingly invaluable.”

—Bianca Peterson

—North-West University - South Africa
The Present

- July 10-21, 2017
- Trieste, Italy - Abdus Salam International Centre for Theoretical Physics
- Applications are open for #DataTrieste 2017
  - Send interested students to http://indico.ictp.it/event/7974/ to apply
- Addition of an Advanced Session July 24-28 focusing on Bioinformatics Data
- Several former students interested in becoming future instructors will be invited
The Future

- December 2017
- Sao Paulo, Brazil - International Center for Theoretical Physics - South American Institute for Fundamental Research (SAFIR)
- Continue to build instructor and classroom assistant base - “Train the trainers”
- Build a sustainable infrastructure to allow future schools to be planned and executed without the continual struggle to find funding
- We currently have more requests for providing summer schools than we have effort
- Plan to add 1-2 additional school instances in 2018
Special recognition to Simon Hodson, Hugh Shanahan, Anelda van der Walt, and Andrew Harrison for doing all the work to make #DataTrieste 2016 possible and for continued support into future schools.

And thanks to the 16 instructors who made #DataTrieste 2016 a huge success.