

Computer tools in particle physics

Information

This is the website for the course [Computer tools in particle physics](#) by Avelino Vicente, to take place at [Instituto de Física Corpuscular](#) (CSIC/Universidad de Valencia).

Dates: Monday 22/05/2017 - Friday 26/05/2017

Place: IFIC - Sala de Audiovisuales (Nave experimental)

Time: 15:00

Duration: 1.5 h for the first session and 1 h for the rest

Material and required programs

This will be a hands-on course, where all participants are encouraged to run all codes in their own laptops. The only required programas are [Mathematica](#), a [LaTeX compiler](#) and [Fortran 90 and C++ compilers](#). If you wish to fully participate please download the following files:

- For lecture 1: [run_sarah_Scotogenic.nb](#) and [Scotogenic.tar.gz](#)
- For lecture 2: [micromegas_4.2.5.tgz](#)
- For lecture 4: [run_sarah_DarkBS.nb](#), [DarkBS.tar.gz](#) and [plotDarkBS.txt](#)

You should also download the latest versions of the codes we are going to use (exception: for lecture 2 we will use an old version of MicrOMEGAs, see above). You can find them in their official websites (links on your right). Finally, the slides of the course are available here: [introduction](#), [lecture 1](#), [lecture 2](#), [lecture 3](#), [lecture 4](#) and [lecture 5](#).

References

The course will mainly focus on the material contained in the following notes:

[Computer tools in particle physics, A. Vicente, arXiv:1507.06349](#)

About

This is the website for the course [Computer tools in particle physics](#). IFIC (CSIC/U. Valencia), May 22nd - 26th, 2017.

Links

- [SARAH](#)
- [SPheno](#)
- [MicrOMEGAs](#)
- [MadGraph](#)
- [MadAnalysis](#)
- [FlavorKit](#)

Contact

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For questions and comments, you can send me an [e-mail](#).