

Producing the Conference Proceedings

The Proceedings of the 2004 edition of the FEL Conference have been produced thanks to the long experience and deep knowledge matured among the Joint Accelerators Conference Website’s “working group” (JACoW – see <http://www.JACoW.org>).

The JACoW collaboration has recently developed the SPMS, a new Open Source tool that aims to automate as many tasks a conference like this requires to perform. This includes full abstracts treatment (collecting, accepting, editing, etc.), generic conference management (sessions, speakers, posters, etc.) and production of final proceedings.

This SPMS, acronym that means “Scientific Programme Management System” has been adopted by and customised for FEL 2004: being founded on a back-end database with a web interface, it has recorded all the proposed abstracts (pure text plus simple formulæ), helped put them into sessions, produced the Abstract Booklet, kept all the information about the scientific contributions and produced the proceedings.

Every single contribution has been submitted to the SPMS in Adobe PostScript (PS) format and, for most of the cases, in ‘source’ format (mostly Microsoft Word files and \LaTeX): a well-motivated and extremely effective group of persons from Sincrotrone Trieste, during and after the conference, has then checked the files for fonts/graphics (un-)readability and adherence to proposed conference templates, hence transforming all the contributions in Adobe Portable Document Format (PDF) files.

With all the metadata (titles, list of authors and related institutes, etc.) in a database and all the accepted PDF files on a server, going to the production of the Proceedings was very easy. A novel package in the SPMS, developed for this conference, permitted to generate a \LaTeX source file that, when compiled, merged all the contribution files into one and in the proper order, inserted running page numbers, inserted different headings and footers for different pages, created the Table Of Contents and various other indexes. As a result, one PDF file has been produced to print this book, together with several HTML and PDF files to publish on the web and on the CD.

Commercial software was only needed to create the PDF’s (Acrobat Distiller), touch up the PDF’s (Adobe Acrobat and Enfocus PitStop – see <http://www.enfocus.com>), seldom to change the source files (if generated by Microsoft Word). All the other steps have been performed using Open Source tools: \LaTeX , \pdfTeX with the `pdfpages`, `fancyhdr` and `multind` packages, `vim` for editing (<http://www.vim.org>), Perl scripts for a couple of global changes in PDF files, GNU/Linux for the Operating System. Even if the SPMS is currently based on Oracle, its code has been released under the GNU General Public License (see <http://www.gnu.org/licenses/licenses.html>).

I hope that this information will be of use to future conference organisers.

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