

## ERCOFTAC conical diffuser case study

- Described in the OpenFOAM Wiki:

[http://openfoamwiki.net/index.php/Sig\\_Turbomachinery/\\_ERCOFTAC\\_conical\\_diffuser](http://openfoamwiki.net/index.php/Sig_Turbomachinery/_ERCOFTAC_conical_diffuser)

(openfoamwiki.net, click on User Pages, Special Interest Groups, Turbomachinery, Validation test cases, ERCOFTAC conical diffuser)

- Available through SVN at SourceForge.

- Features:

- Description of the geometry and measurements, and references to relevant publications.
- Parameterized mesh generation with `m4` and `blockMesh`.
- A new axi-symmetric profile boundary condition.
- A new utility for setting solid-body swirl at patches and internally.
- Validation against experimental data using `sample`, `gnuplot` and `mozilla`.

- Run `Case0`, `Case1.3`, and finally `Case1.2` (this will take some time!). Check all of the set-up procedure in detail!