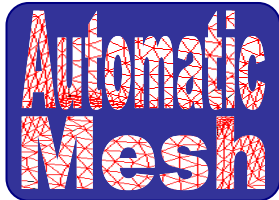


Flux^{V10.3}

What's new to support you in your daily job?

New



Automatic initial mesh based on geometry

- » **Automatic mesh for an easy pre-processing**

An ideal feature for new Flux users. You will be able to generate in one click the same mesh as an advanced FEM specialist.

- » **Keep mesh control for the most accurate calculation**

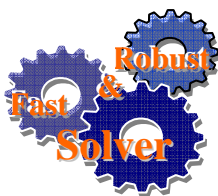
Possibility to overload automatic mesh with classic Flux mesh tools (mapped mesh, linked mesh) providing a lot of flexibility (skin depth mesh with mapped mesh, mesh copy for periodic patterns,...)



Flux – Portunus Co-simulation : the right tool to let your multi-domain competences collaborate

- » New co-simulation capabilities enabling **to design at once the device and its drive and control part** taking into account saturation, eddy currents, control loops...

- » **Key multiphysics applications** : motor control, sensor control with electronic panel in-between, motor – generator linked together



Flux Solver improvement : More results in lower time

- » **General acceleration** thanks to 32 bits optimized compiler

- » **Enhanced capabilities** to model eddy currents in surface regions: New algorithm to generate shell elements & possibility to define surface impedance region touching volume solid conductors

- » **Automatic static initialisation for transient simulations**: faster calculation and better convergence

- » Fujiwara option for Newton Raphson non linear solver to accelerate convergence and calculation time when non linear materials involved

Circuit editor integrated in Flux



Flux post-processor improvement: an easy to use interface requiring lower resources from the system, more comfortable to use in the daily job

- » News 2D curves and graphs, showing calculated and extra poled data depending on your cursor position

- » Enlarged colour scale, enabling more accurate drawing reading of the calculation.

- » New arrows style, offering more sensibility for a better interpretation of the results on the drawing



Simulate increasingly complex cases on your working stations, at a low price

Flux 10.3 now benefits from Linux technology (while also remaining optimised for 32 and 64 bit Windows OS).

Operating systems:

- » **Linux: Red Hat Enterprise Linux Edition 5**, 32 bits & 64 bits

- » Windows: XP Pro 32 & 64 bits, 2003 32 & 64 bits, Vista Pro 32 & Vista Pro 64



New html user guide

- » Enhanced presentation

- » New searching capabilities

- » Same for Linux and windows



Import of Speed motor overlays

- » Compatibility with 2007 version of Speed



Possibility to run 2D simulations in Flux environment providing

- » A single environment from preprocessing to post-processing in 2D

- » **Full python control** now available in 2D

- » Extended capabilities to describe **device motion**

- » Additional possibilities for parametric simulations

The 2D legacy remains available for every 2D users