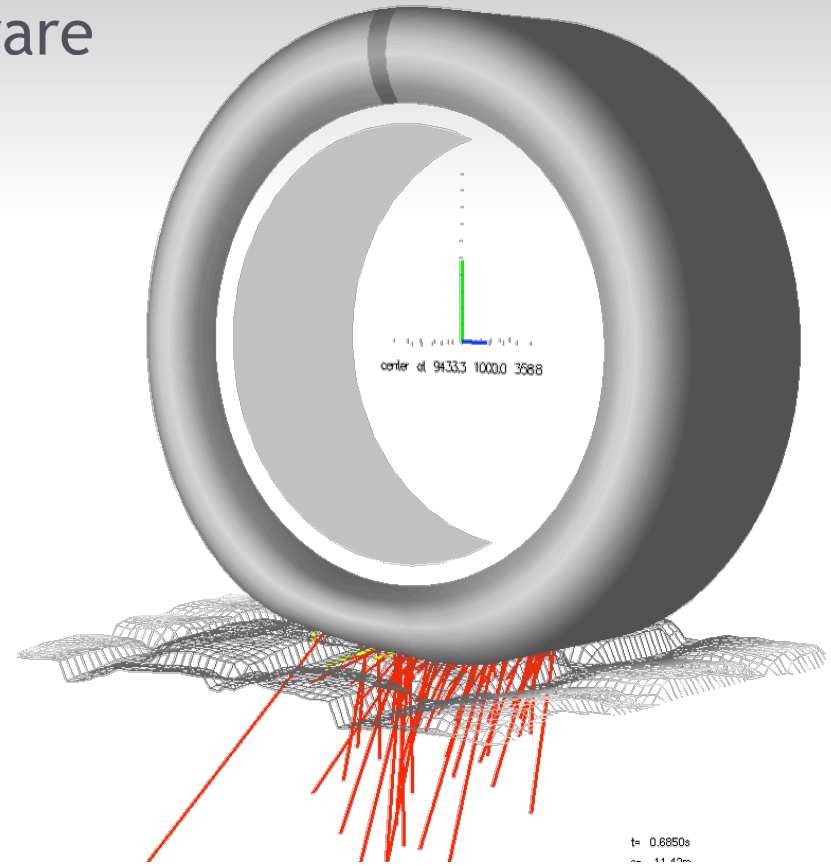
cosin
scientific software



FTire: a Physically Based Tire Model for Handling, Ride, and Durability

Part 8: Outlook

Michael Gipser
Esslingen University of Applied Sciences
& cosin scientific software

Finished, included in Releases V2011-2 .. V2011-4

- Implementation and integration of wheel modules:
  FTire completed by detailed MBD suspension models
  on basis of cosin/mbs

- *FTire/client-server* remote computing

- Automatic model export *FTire* → MF 2002

Finished, included in Release V2012-1

- Air volume vibration model for cavity modes
- Flexible and deformable rim
- Tire slipping on rim
- More Advanced Non-Rigid Road Models for snow / soil / sand
- *FTire/realtime* for HiL simulators

Integration into New Environments

- Abaqus™
- PAM-CRASH™
- VI-CarRealTime™
- dSPACE ASM™
- MTS HSRC™

More..

- Integration of a Graphical Editor into *FTire/editor* for simplified processing of cross-section geometry, tread pattern, and distributed imperfections

- FEA-Based Parameterization

- New Soft-soil model based on granular material simulation

..thank you for your attention!

Q & A

FTire etc.
demo versions,
papers,
animations,
documentation,
version updates,
and more:

www.cosin.eu