Software Working Group

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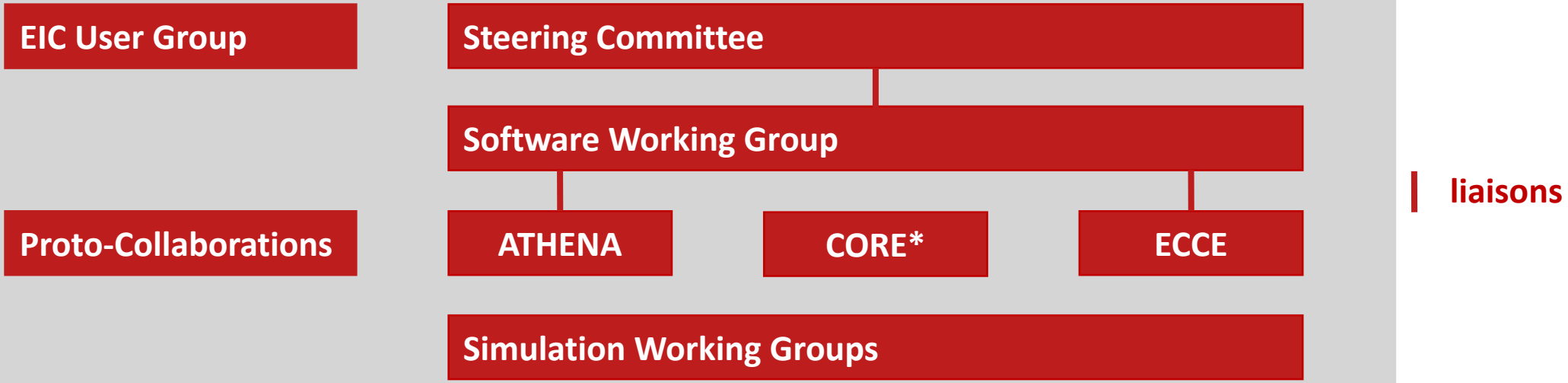
Working Together

After a presentation on “Breakthroughs in Detector Technology”, Ian Shipsey (Oxford) was asked about the role of software.

Anecdote

"***Software is the soul of the detector,***” Ian Shipsey replied in a poetic way and emphasized the **importance of great software for great science**. He added that we need to **work together**, on a global scale and with other fields, to achieve this goal.

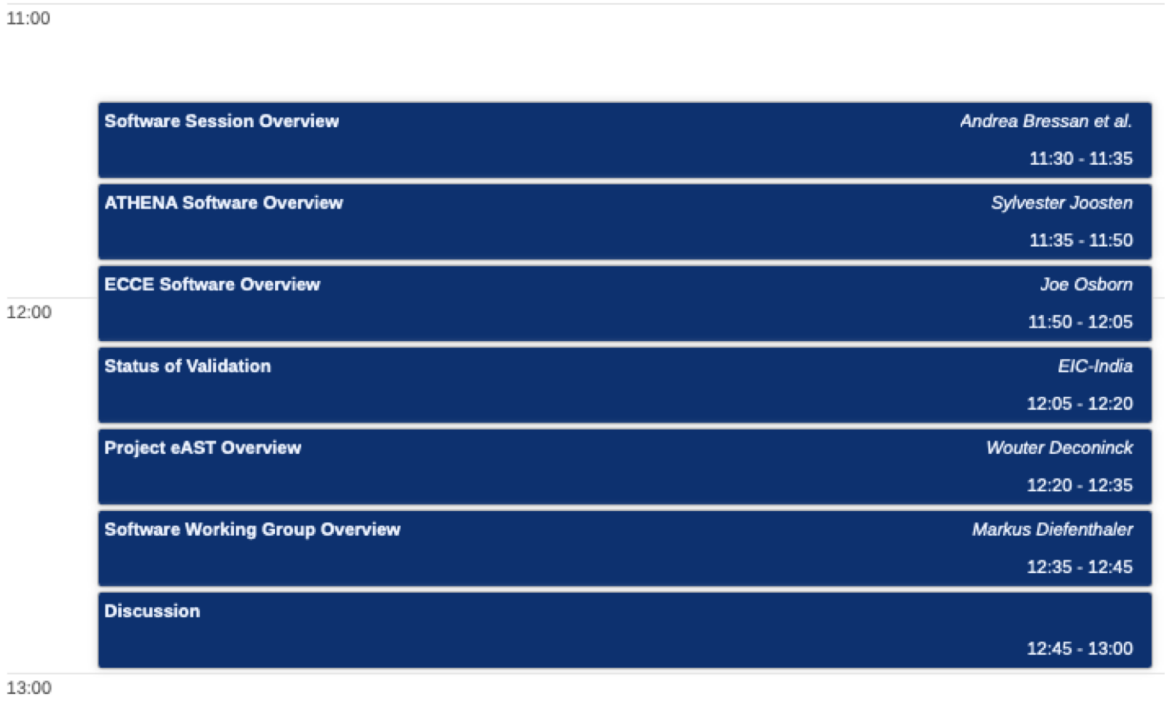
Common Software Effort



* CORE adapts existing software for their needs and has a far smaller software effort than other proto-collaborations.

Software Session

Indico



Essential Experience

- **ATHENA, CORE, ECCE** Build upon common software and simulation effort of the recent years, e.g., YR.
- **ATHENA** Explore modern software tools (as specified in YR).
- **CORE, ECCE** Take advantage of mature software tools.
- **ATHENA, ECCE** Detailed full simulations of detector concepts with more than 435M events produced.

Lessons learned from ATHENA, CORE, and ECCE important for future direction(s) of EIC Software.

Common Software Projects

- Software EoI (29 institutions), including:
  - Validation of simulations tools
  - Next-generation eA Simulation Toolkit (eAST)

Interplay of Science and Software & Computing