

# LifeV Head

Gilles Fourestey

Chaire de Modélisation et Calcul Scientifique  
Institut d'Analyse et de Calcul Scientifique  
Ecole Polytechnique Fédérale de Lausanne, Switzerland

# Ethier-Steinmann Problem

## Problem definition:

- 128x128x128 mesh, P1-Bubble/P1
- 9M Unknowns, 1024 processors, BlueGene/P.
- Trilinos 9.0.3, UMFPACK with GMRES.

## Results:

- Updating the Convective term: 25 s.
- Computing the Preconditioner: 116 s.
- Solving the system: 33 s.
- Overall timestep Comp. time: 179 s.

# Question

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Why don't you join us?

- Trilinos 9.0.3 compatible, Boost library
- MPI 2.0
- GCC 4.3
- Compilation on XT4, XT5, BlueGene/P
- LifeV-serial mathematic core library is the same
- Advanced classes (FESpace, EpetraMatrix, EpetraVector, TrilinosSolver, Composed operators ...)
- Oseen, ADR, (Linear) Structure, 1D models ...
- Development mainling list