



Contribution ID: 17

Type: **Contributed talks**

Non matching grids in a distributed setting

Wednesday, July 25, 2018 11:00 AM (20 minutes)

I am beginning this talk with a quick recall of the general difficulties faced when using multiple grids on a distributed memory setting and some possible solutions.

As a model problem I am presenting briefly the Lagrange-multiplier method of step-60, where a harmonic equation with values prescribed at the boundary and on a sub-domain is solved, with a particular focus on the coupling matrix used. After discussing how a partial solution making use of bounding boxes was implemented in deal.II 9.0, I am discussing its current limitations and intended developements.

Primary author: Mr ALZETTA, Giovanni (SISSA)

Co-author: Prof. HELTAI, Luca (SISSA)

Presenter: Mr ALZETTA, Giovanni (SISSA)

Session Classification: Contributed talks

Track Classification: Users' track