Bringing POMPA back to the trunk

Dicussion

COSMO GM13, Sibiu

Strategy

- **Goal: Version 5.x with POMPA developments in trunk until December 2014**

- Guideline: COSMO Coding Standards

- Path: WG chairs → SMC → SCA → Trunk

- We should bring changes back step-by-step

Developments

- **Static memory allocations**
- **Block physics**
- **Serialization**
- **Single precision**
- **New communication interfaces**
- **New handling of BCs**
- Code refactorings
- OpenACC directives
- HP2C Dycore

- Re-ordering of operations
- Bugfixes
- …

New communication interfaces

- See presentation at last COSMO GM12
  http://www.cosmo-model.org/content/consortium/generalMeetings/general2012/wg6-pompa/newhaloexchg_Fuhrer.pdf

- See code example

- Differences with respect to existing API
  - Exchanges are setup statically
  - Reference to exchange via unique ID
  - Removal of many IF's

- WG6? Timeline?

New handling of lateral BCs?

- See presentation at last COSMO GM12
  http://www.cosmo-model.org/content/consortium/
  generalMeetings/general2012/wg6-pompa/
  boundary_conditions.pdf

- See code example

- Differences with respect to existing API
  - BCs handled by a specific module (src_lbc.f90)
  - Changes mainly in dynamics
  - Work not fully done

- WG2? Timeline?

General discussion

- Conflicts with other developments?
- Different priorities at DWD?
- Is December 2014 realistic to get these developments in?