



# TSVV3 – Regular advancement meeting

21/09/2022 – Task 7: complex geometries

*Project news*

**P. Tamain**





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# Today's meeting agenda



## Bi-weekly progress meeting - task 7 (complex geometries - part 2)

 Wednesday 21 Sep 2022, 14:00 → 16:10 Europe/Berlin

 <https://cesnet.zoom.us/j/91522625134?pwd=UER3clhUL2cxVFM2KyszRzVRZEhkQT09>

**14:00** → 14:15 **Project news and updates**  15m 

**Speaker:** Patrick Tamain (CEA)

**14:15** → 14:35 **Round-table review of progress, difficulties...**  20m 

Each contributor makes a flash report (typ. 2mn, with 1 slide if necessary) about what they have been working on since the last meeting, any progress or difficulty

**Speaker:** All

**14:35** → 15:05 **A finite volume flux coordinate independent approach**  30m 

**Speaker:** Matthias Wiesenberger (DTU)

**15:05** → 15:35 **Progress on 3D simulations with GBS**  30m 

**Speaker:** Antonio Coelho

**15:35** → 16:05 **Curvilinear coordinates in GBS**  30m 

**Speaker:** Louis Stenger



- ❖ Final dates: **October 11<sup>th</sup> - 14<sup>th</sup>** (Tuesday – Friday)
- ❖ Agenda in prep, likely 3 days devoted to common solver issues, 1 day devoted to code-specific aspects
  - Preparation meeting to finalize plan =>  
<https://doodle.com/meeting/participate/id/boQ9jk3e>

# Paper on numerical methods for fusion?



- ❖ Contacted by editor of Journal of Computational Physics (informally for the moment) to probe the idea of a **review paper on numerical methods in magnetized fusion plasma modelling**
- ❖ Suggestion: limit this to fluid modelling for the edge plasma and make it a common TSVV3 paper
- ❖ Please give it a thought, we will discuss it more in depth at the next meeting



## Reduced turbulence models

M Baelmans et al : 20th September 2022 | DocumentID : 33102

: [Model advancements in mean-field plasma edge codes to enable computationally achievable simulations of the ITER and DEMO reactors](#)

Conference : Fourth Technical Meeting on Divertor Concepts, Vienne, 7th November 2022.

## PIC SOL modelling

D Tskhakaya et al : 19th September 2022 | DocumentID : 33097

: [Dressed cross-section method](#)

Conference : 12th International Conference on Atomic and Molecular Data and Their Applications (ICAMDATA), Mola di Bari, Italy, 25th September 2022.

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**Upload presentations** on <https://indico.euro-fusion.org/event/2271/> or send to me please.