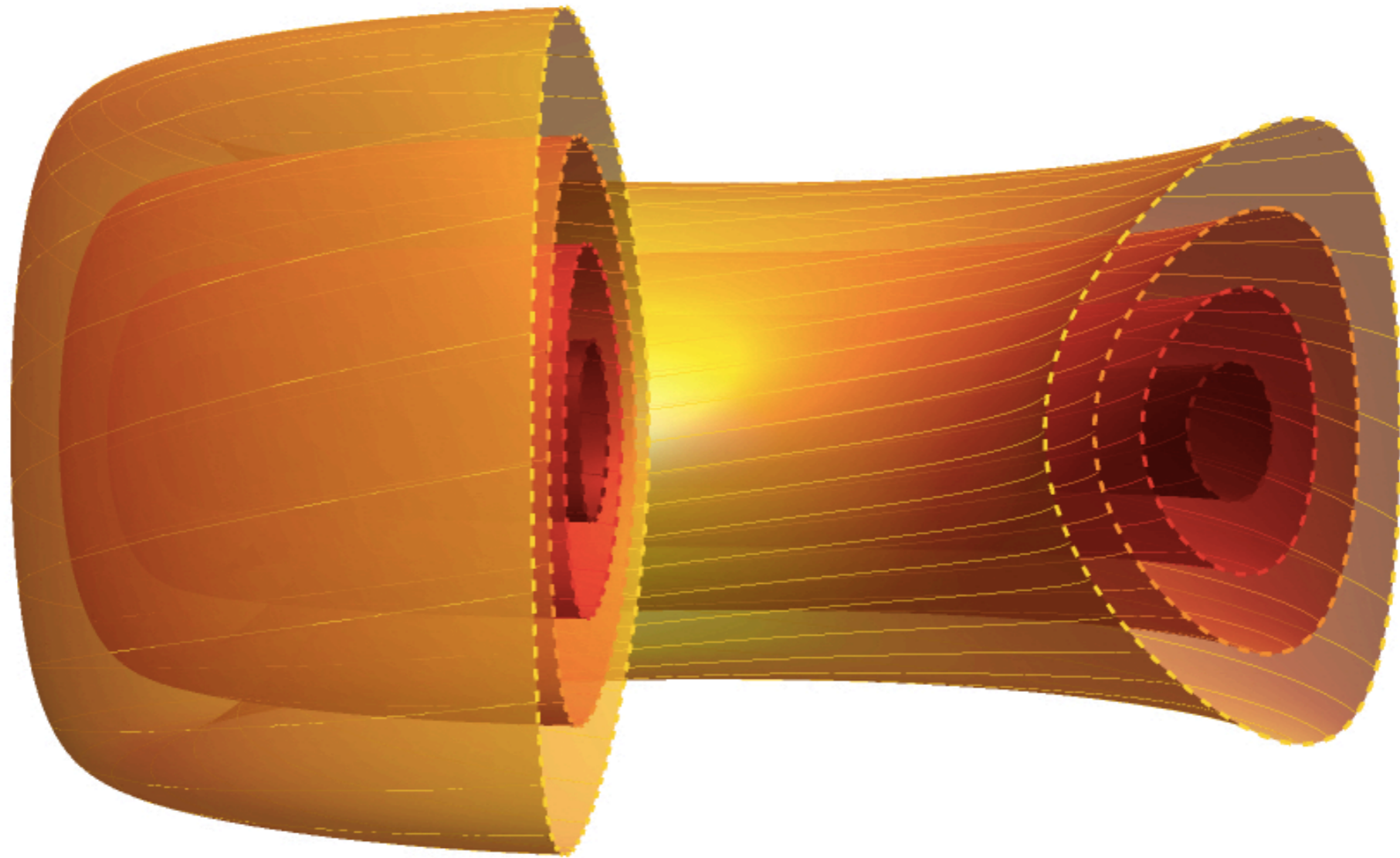# TSVV 2: Negative triangularity October meeting

Justin Ball
26 October 2021

Agenda

- **General updates**

- Roundtable discussion with team members

- Team meeting scheduling and resources

- Comments, questions?

General updates

1. Based on scheduling poll, I propose **Thursday December 2nd** for our annual workshop (conflicts with EFPW though)

   - ~20 minute talks per funded participant with additional contributions welcome

General updates

2. Marconi proposal already mostly complete, but need resource justification, presumably from:

   - GENE: Alberto, Justin, MJ

   - GBS: Maurizo/Paolo R.

   - HYMAGYC: Giuliana/Gregorio

   - ORB5: Giovanni

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Current work

- Modifying GENE to enable runtime input of geometric coefficients to facilitate easier swapping

- Developing the workflow to use g-eqdsk files from DIII-D equilibria in GENE

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Team meetings

- Default monthly meeting schedule (subject to exceptions):

  - Whole team meeting: 4th Tuesday at 15:00

  - Core turbulence topical meeting: 2nd Thursday at 11:00

  - SOL turbulence topical meeting: 2nd Wednesday at 15:00

  - MHD+fast particles topical meeting: 2nd Thursday at 13:00

- Topical group meetings the week of November 8-12

- **November whole team meeting cancelled due to annual meeting**

Marconi reminder

- 66% through the allocation period (March 2021-Feb 2022)

- 13% of the following conventional A3 allocation has been used:

  - GENE: 375k node-hours = 100k (Alberto) + 125k (Justin) + 150k (MJ)

  - GBS: 175k node-hours

  - HYMAGYC: 100k node-hours

- 14% of the following GPU C1 allocation has been used:

  - ORB5: 80k node-hours

Agenda

- EUROfusion updates

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- Team meetings, schedule, and resources

- **Comments, questions?**

All done.

TCV experimental equilibria

- Run some preliminary nonlinear simulations using comparison 3

Comp. Num.	Description	Constants of comparison	Discharge	Time (sec)	elong	delta	betaN	P_nbi (kW)	q95	Ip (kA)	$\langle ne \rangle$ (x10^19 m^-3)	Comments
1	Diverted, PT	q95, betaN	69515	1.02	1.43	+0.29	0.97	636	3.17	242	4.0	not great q95 match
1	Diverted, NT	q95, betaN	69340	0.58	1.42	-0.28	0.97	362	2.94	218	3.3	with Langmuir probes
2	Diverted, PT	q95, ne, Pheat	69515	1.02	1.43	+0.29	0.97	636	3.17	242	4.0	not great q95 match
2	Diverted, NT	q95, ne, Pheat	69271	1.60	1.42	-0.27	1.59	612	2.90	217	4.4	-
3	Diverted, PT	Ip, betaN, ne	69508	1.49	1.43	+0.28	1.12	735	3.31	217	4.0	-
3	Diverted, NT	Ip, betaN, ne	69340	0.58	1.42	-0.28	0.97	362	2.94	218	3.3	with Langmuir probes
4	Limited, PT	Ip, betaN, ne	69511	1.50	1.34	+0.35	1.25	1030	3.38	228	3.4	-
4	Limited, NT	Ip, betaN, ne	69273	0.85	1.29	-0.29	1.30	475	2.85	228	3.4	-
5	Limited, PT	Ip, Pheat	69511	1.50	1.34	+0.35	1.25	1030	3.38	228	3.4	-
5	Limited, NT	Ip, Pheat	69273	1.70	1.26	-0.26	2.02	1020	2.79	226	4.6	-
-	Diverted, PT	-	69515	1.58	1.43	+0.34	1.84	1020	3.29	239	7.1	in H-mode; no CXRS so Ti=Te
-	Diverted, NT	-	69340	1.60	1.40	-0.27			2.92	217	5.4	with Langmuir probes