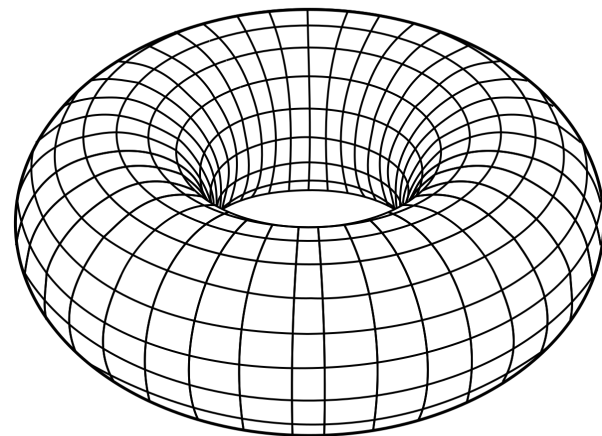
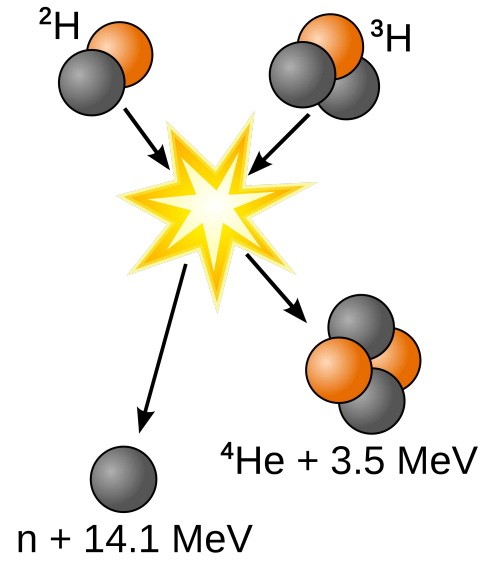


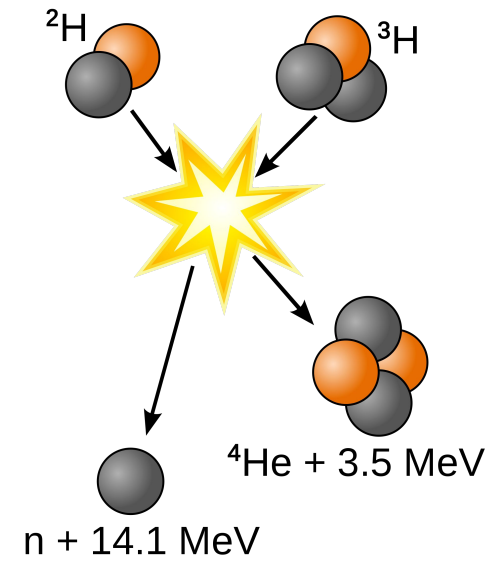
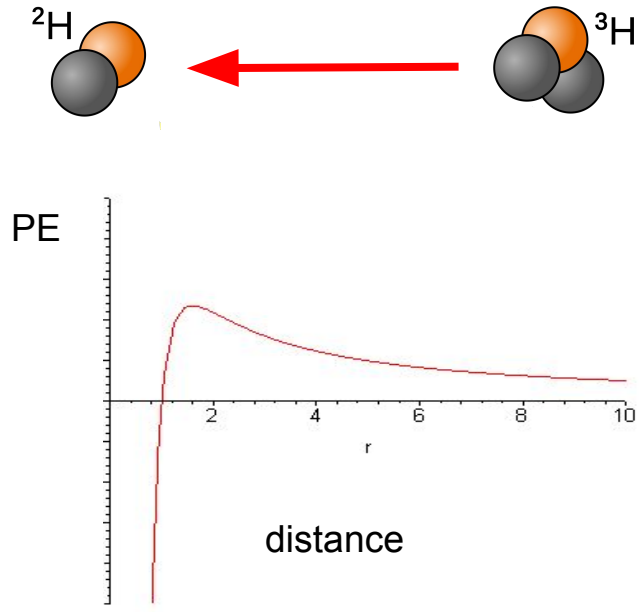
# Magnetized Target Fusion

Alex Wen  
General Fusion Inc.  
University of British Columbia

CUPC 2020 - University of Western Ontario  
5-8 November 2020



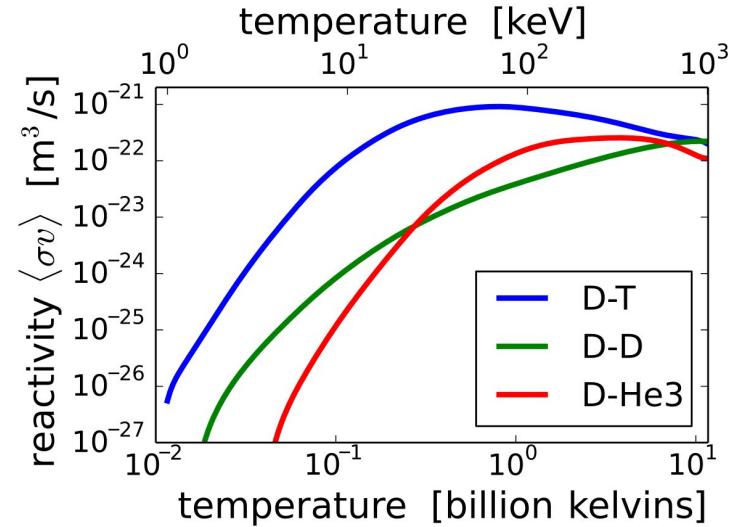




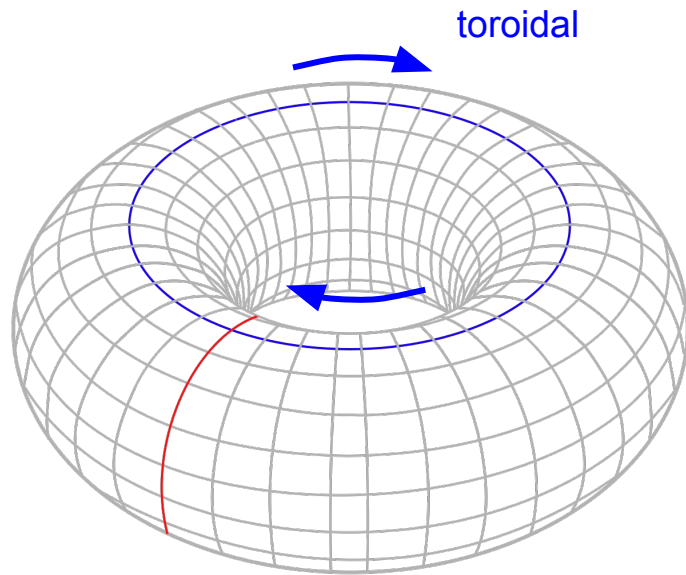
reaction rate  $f$

$$f \propto \langle \sigma v \rangle$$

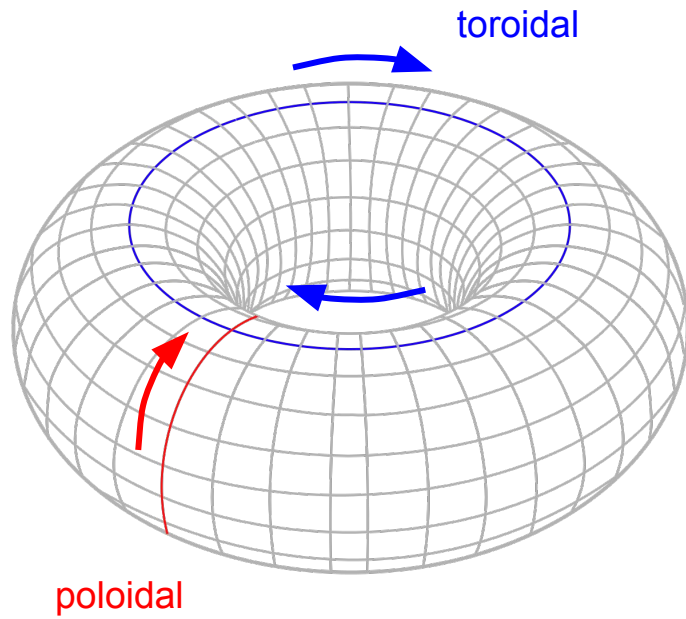
reaction rate  $f$   
 $f \propto \langle \sigma v \rangle$

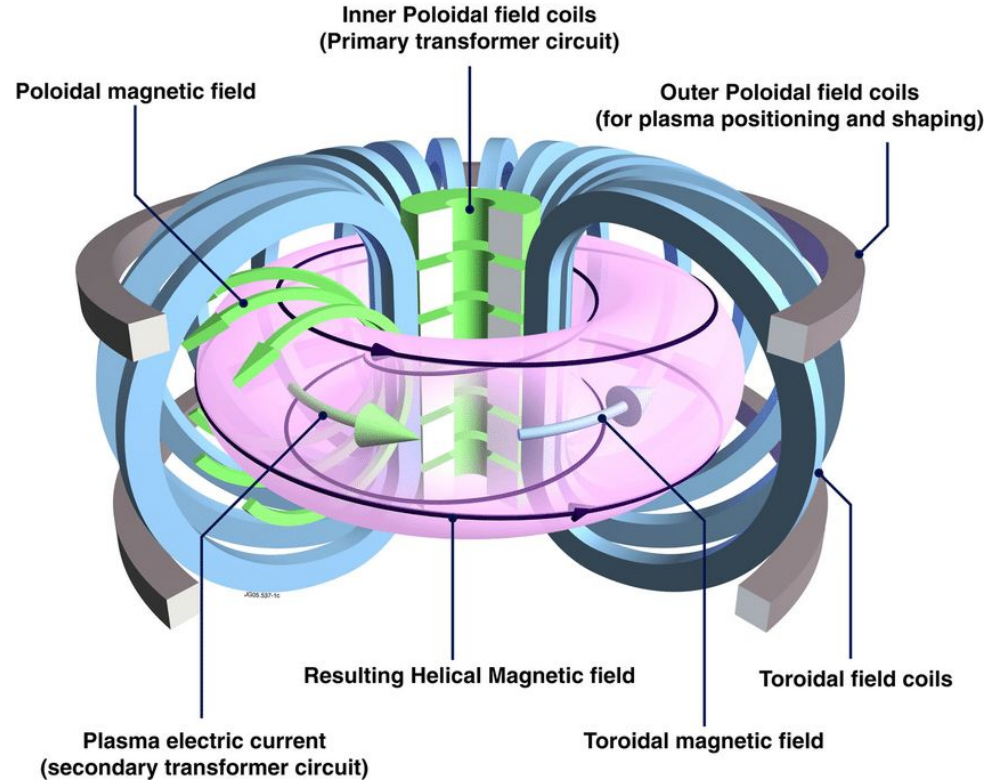
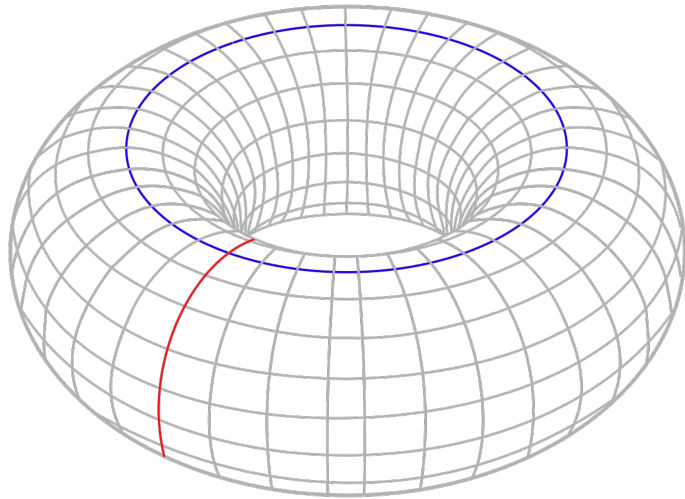


# B field

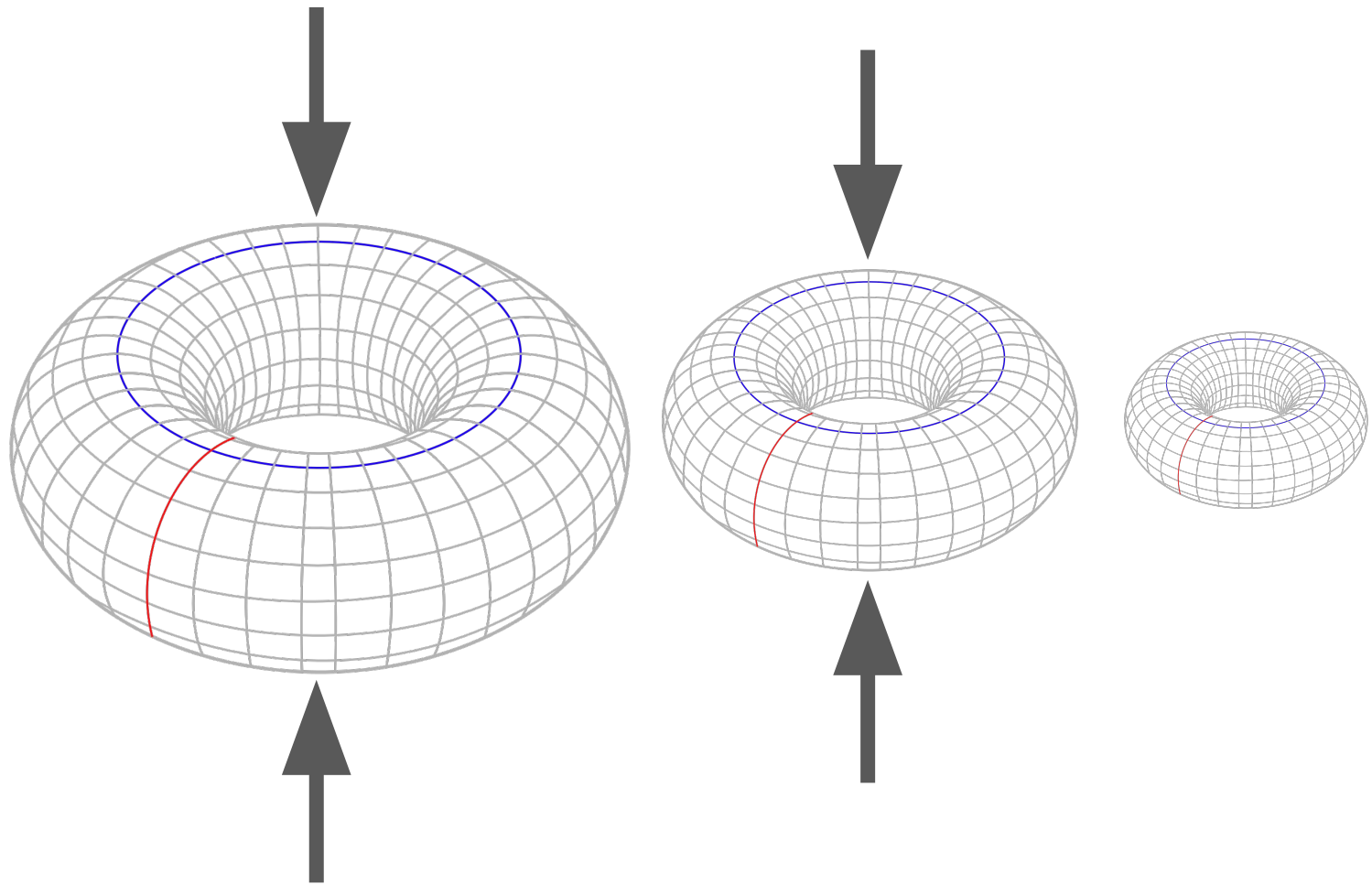


# B field





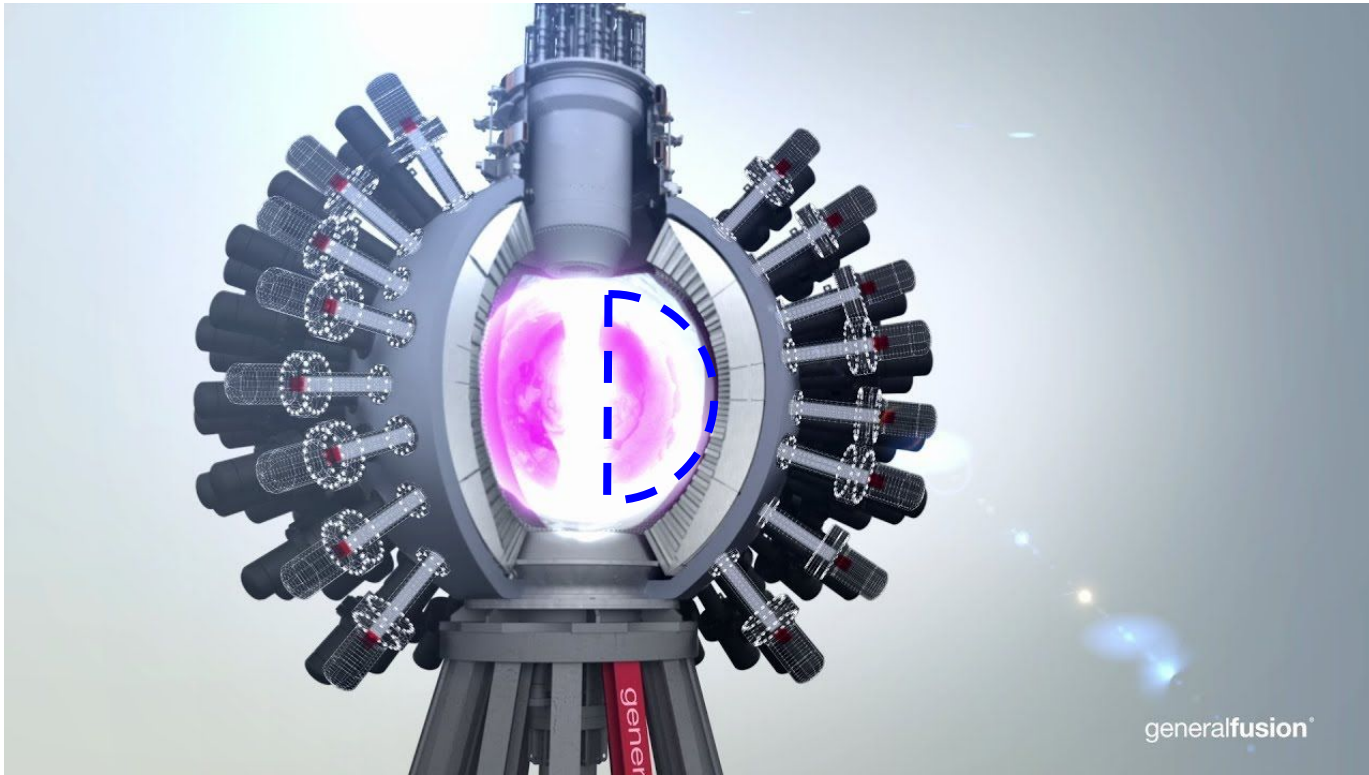


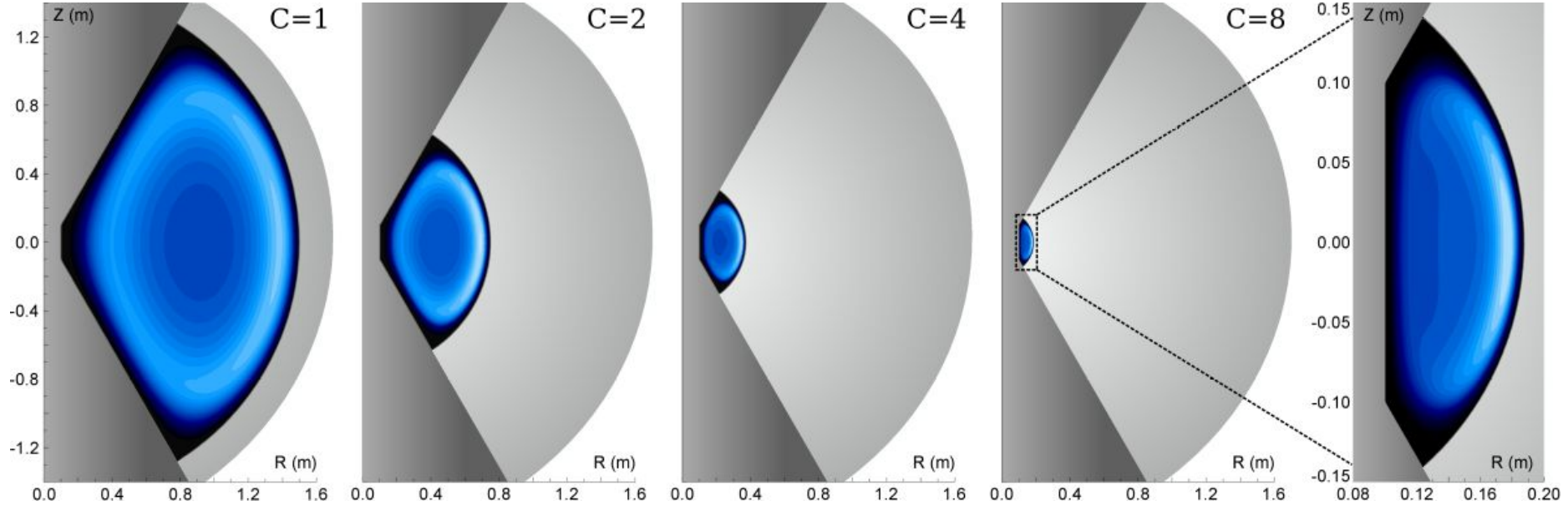


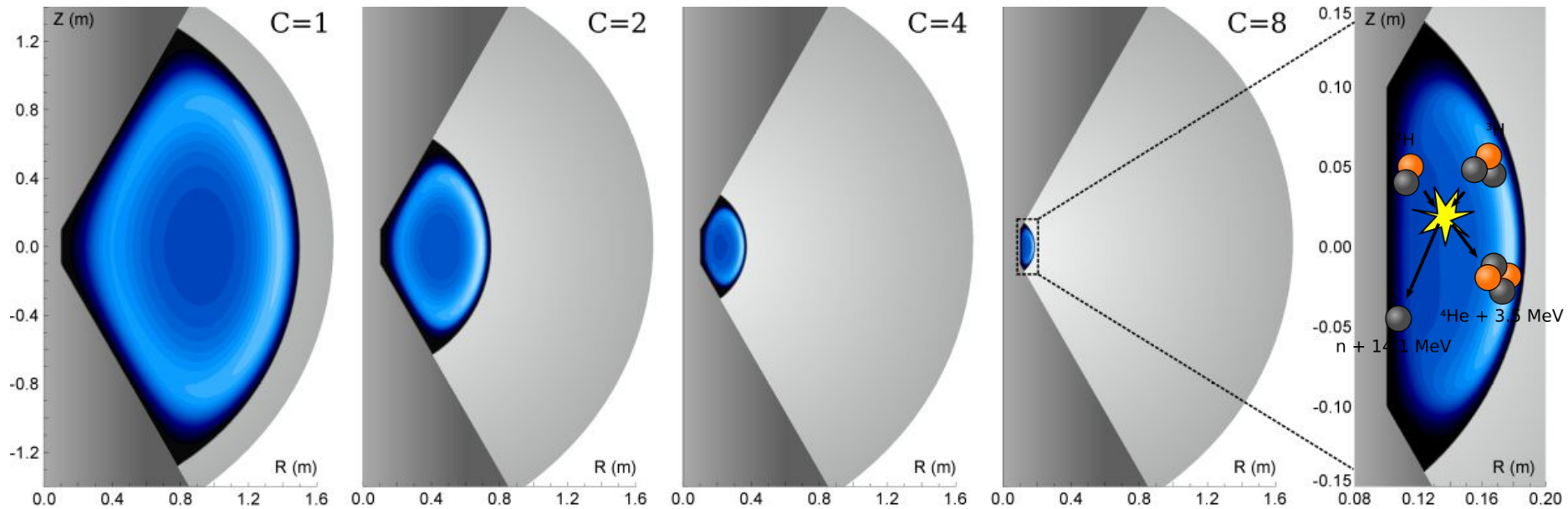




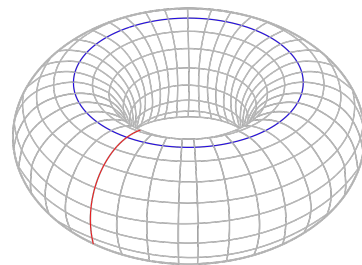
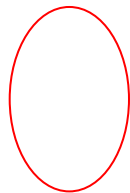
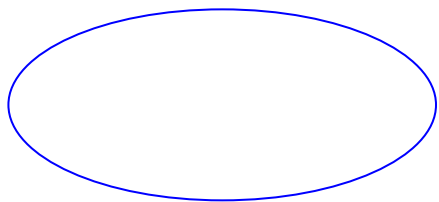






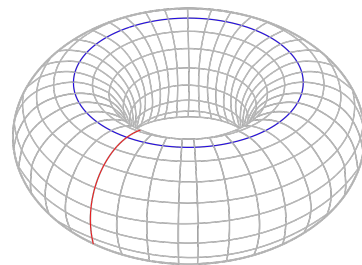
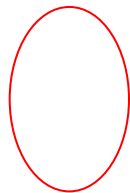
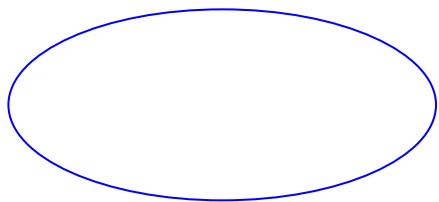


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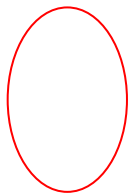
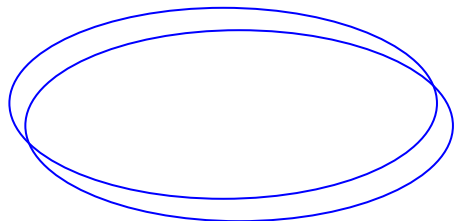




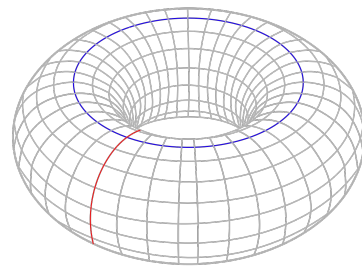
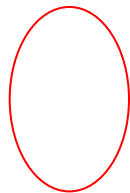
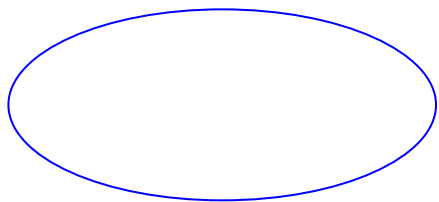
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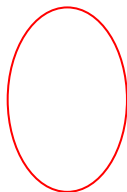
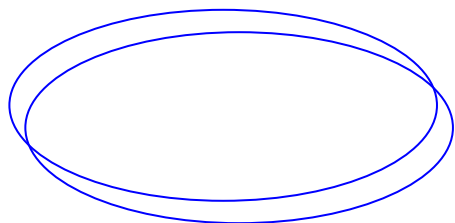
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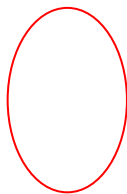
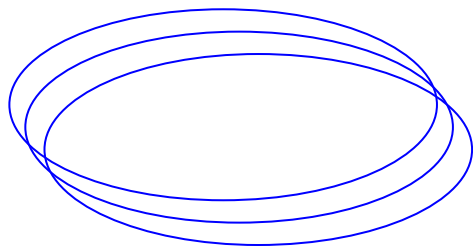
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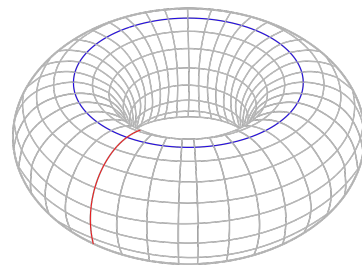
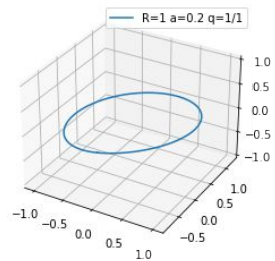
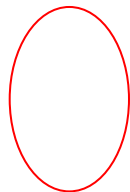
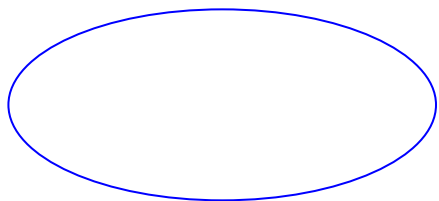
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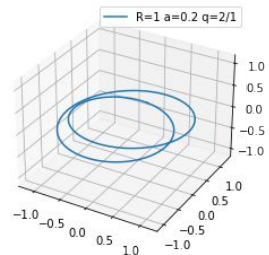
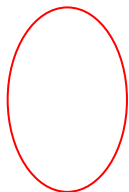
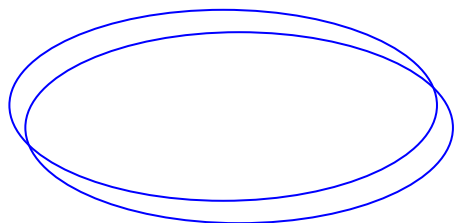
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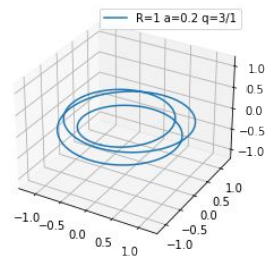
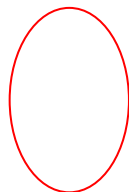
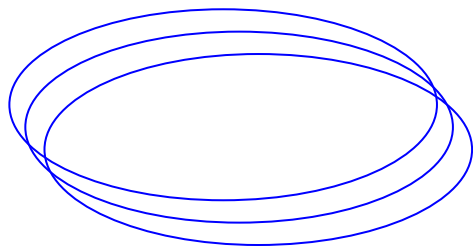
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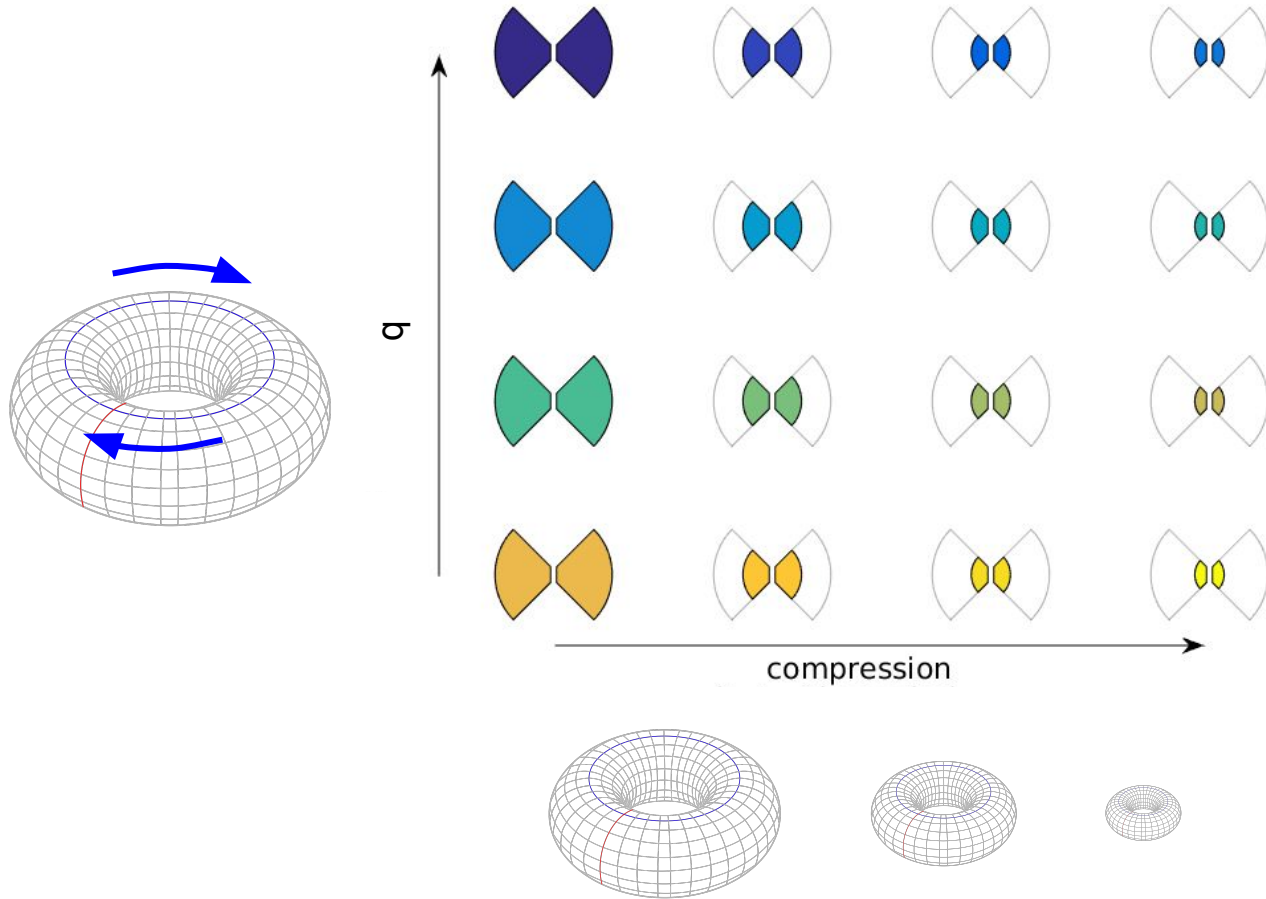
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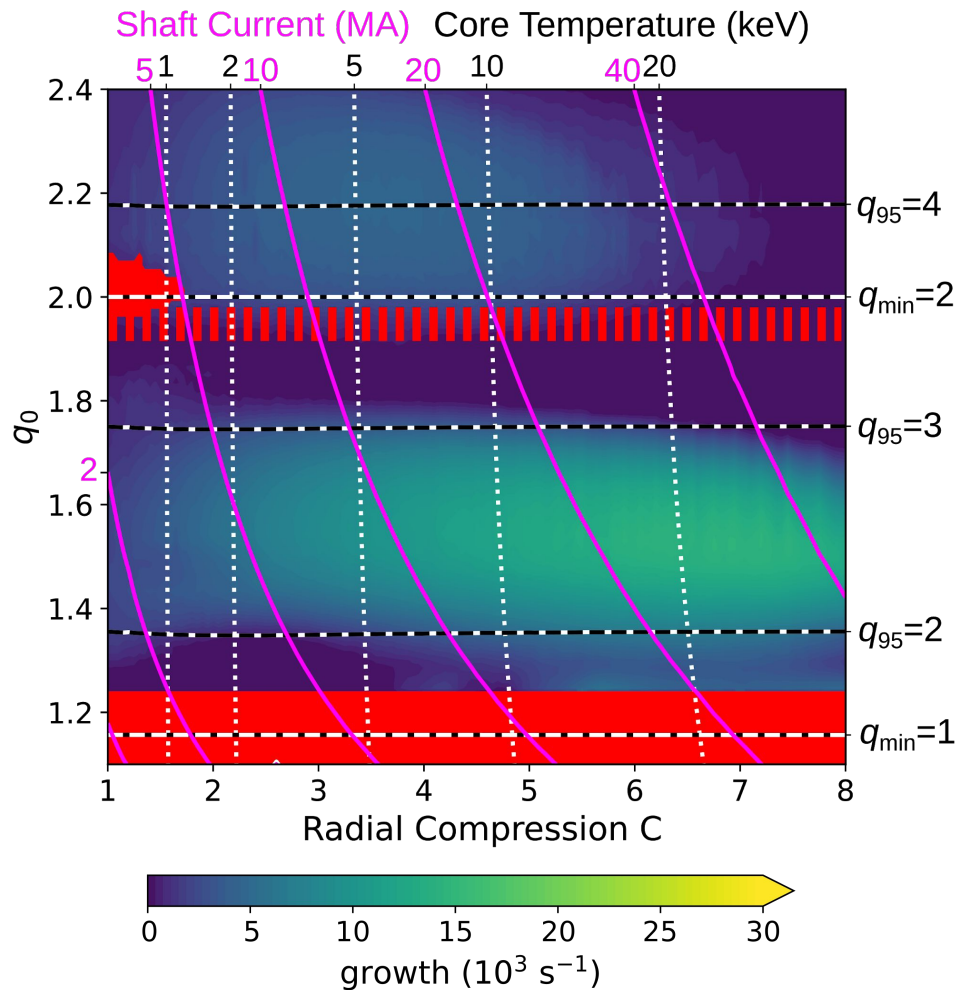


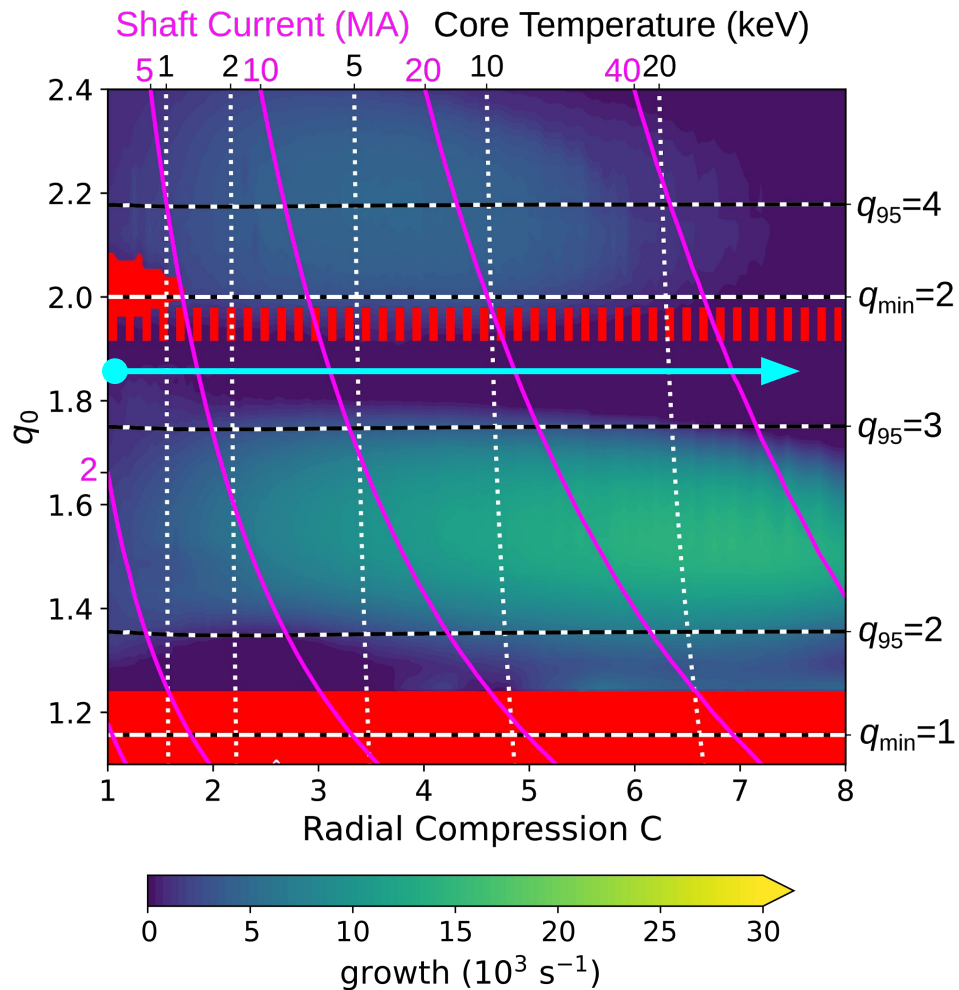
$q = 3$



stability map layout for particular geometry







# Takeaways

- Magnetic and mechanical techniques confine plasma
- A plasma is fragile and may grow unstable
- Simulations help find optimal parameters

Energy & Science

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Temasek and Equinor join equity round in Commonwealth Fusion Systems

By [Akshat Rathi](#)

May 25, 2020, 9:01 PM PDT

ELECTRIC POWER — 30 Sep 2019 | 14:33 UTC — London

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The International Thermonuclear Experimental Reactor is set to launch operations in 2025

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Images: AL\_A

# Thanks for listening!

## More on General Fusion's approach

- M. Laberge, Journal of Fusion Energy 38, 199 (2019).

## Latest simulation work

- D. Brennan, A. Froese, M. Reynolds, S. Barsky, Z. Wang, M. Delage, and M. Laberge, Nuclear Fusion 60, 046027 (2020).

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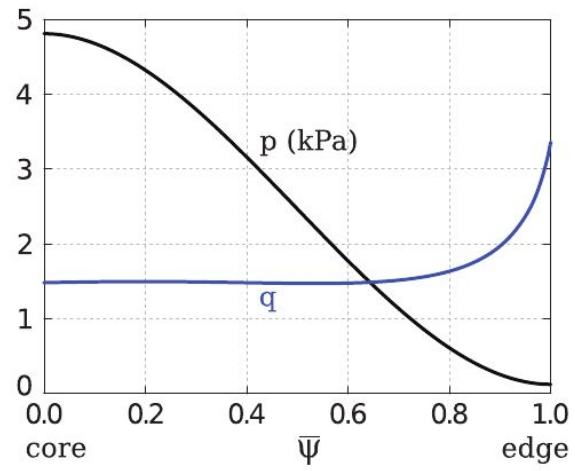
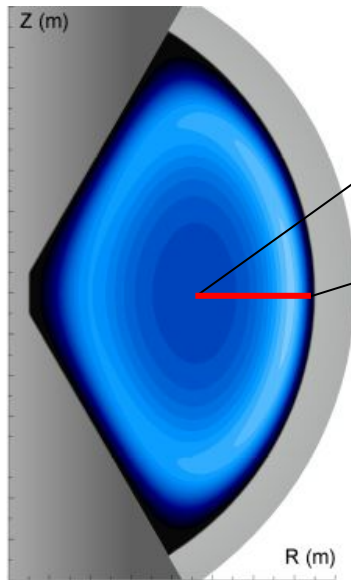


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# Backup



# Papers of Interest

- D. Brennan, A. Froese, M. Reynolds, S. Barsky, Z. Wang, M. Delage, and M. Laberge, Nuclear Fusion 60, 046027 (2020).
- M. Laberge, Journal of Fusion Energy 38, 199 (2019).

