Turbulently-Driven Detonation Initiation in Electron-Degenerate Matter with Helium

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Physics Day February 20, 2020

Type la Supernovae



Stellar Lifetime

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White Dwarf

Degeneracy Pressure



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Zel'Dovich Gradient Mechanism



Turbulence

Kolmogorov's Theory





Carbon Detonation

- "Previous Work"
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Helium Detonation

- Talk about double detonation, maybe D6
- use vishal's video

Triple Alpha

Method

detonation times

slice plots

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helium analytic curves

movies

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PDFs

Implications



Future Work

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Credit