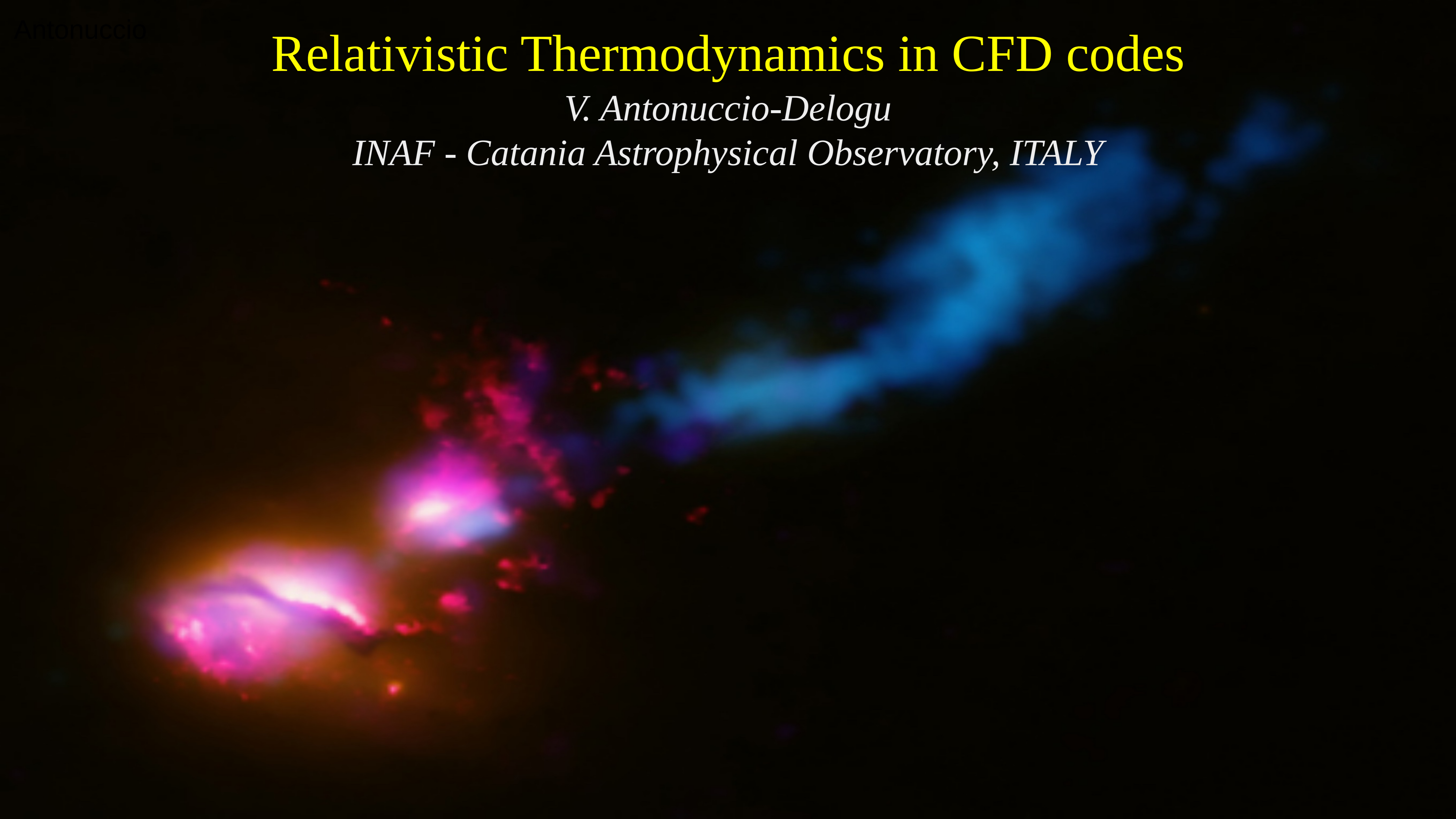


Relativistic Thermodynamics in CFD codes

V. Antonuccio-Delogu

INAF - Catania Astrophysical Observatory, ITALY

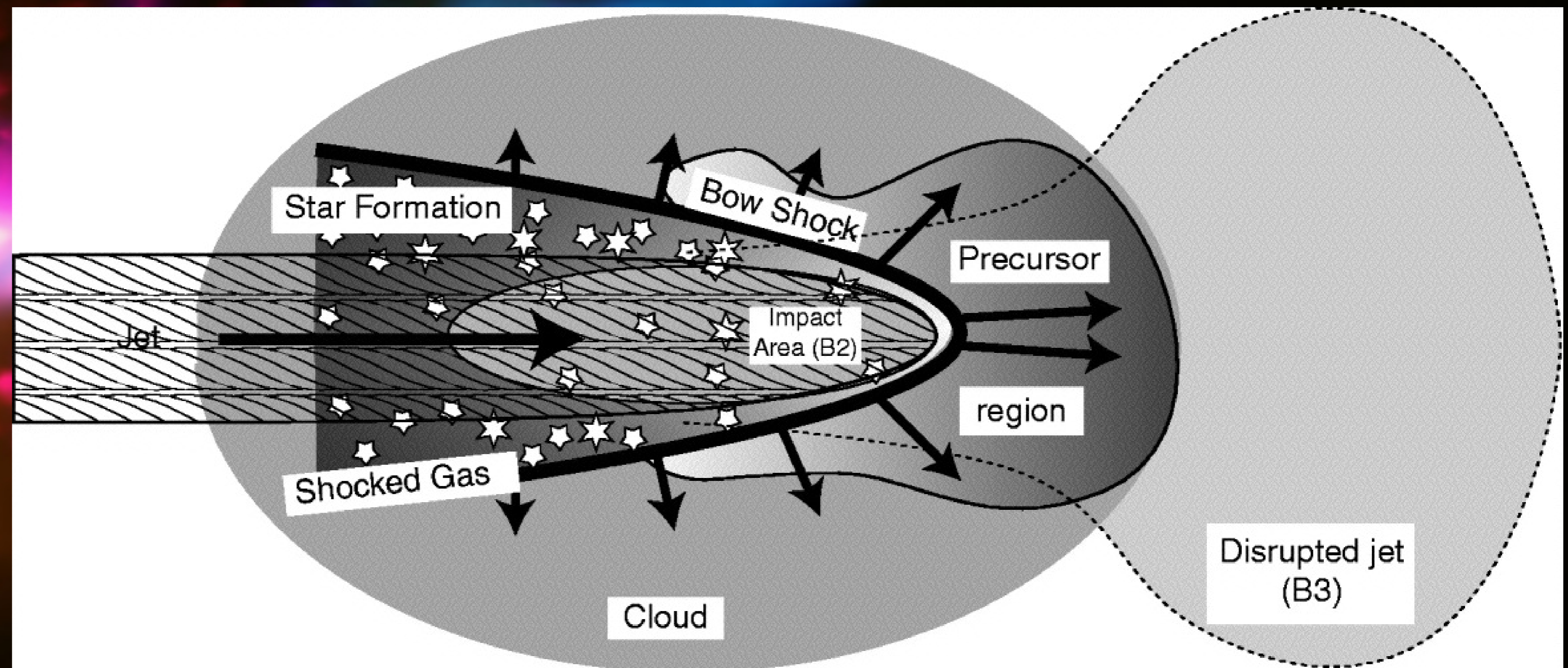


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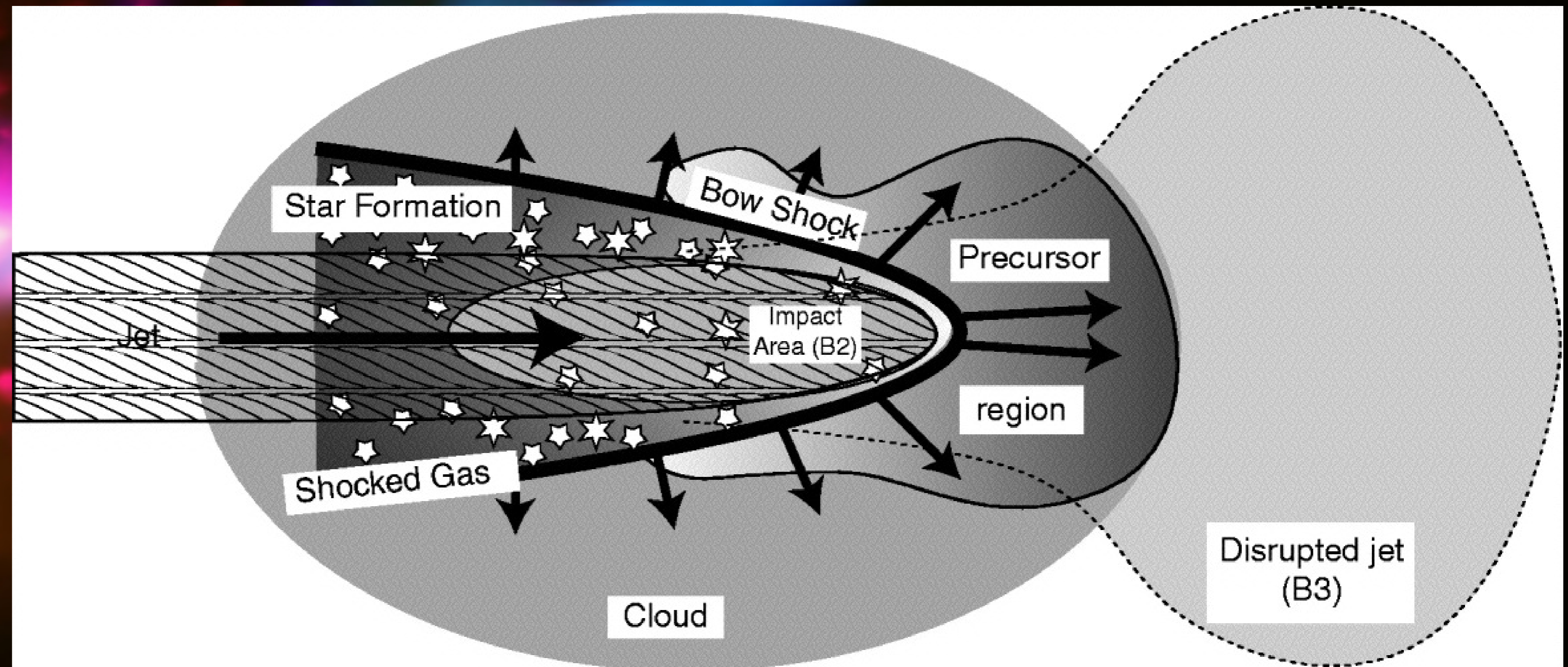
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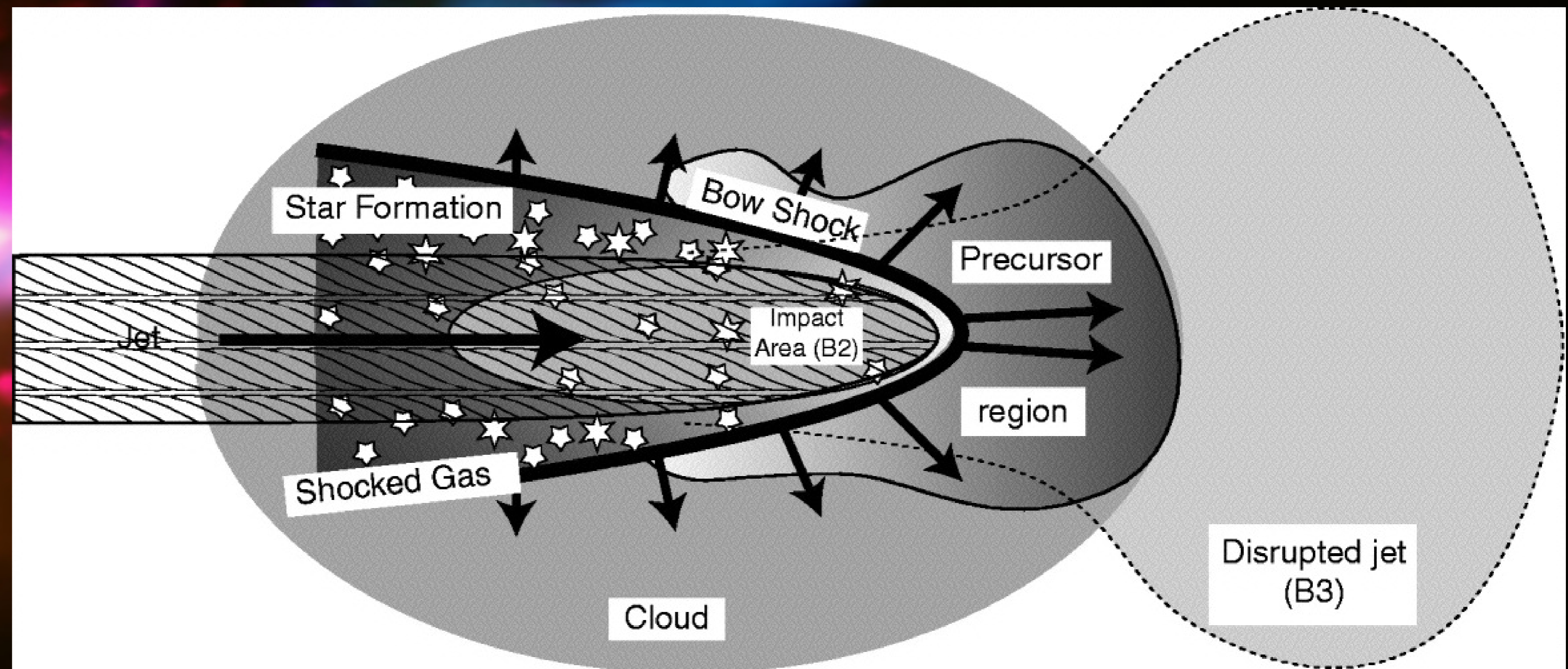
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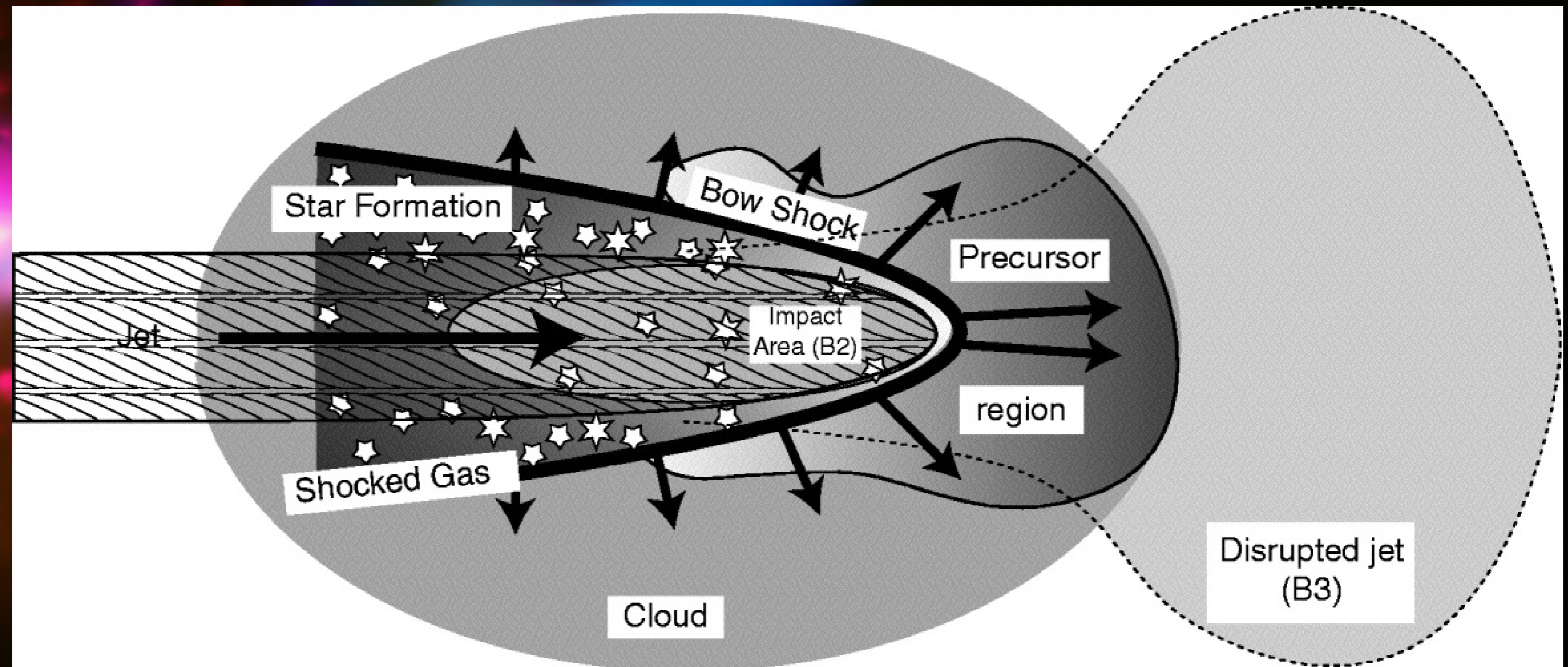
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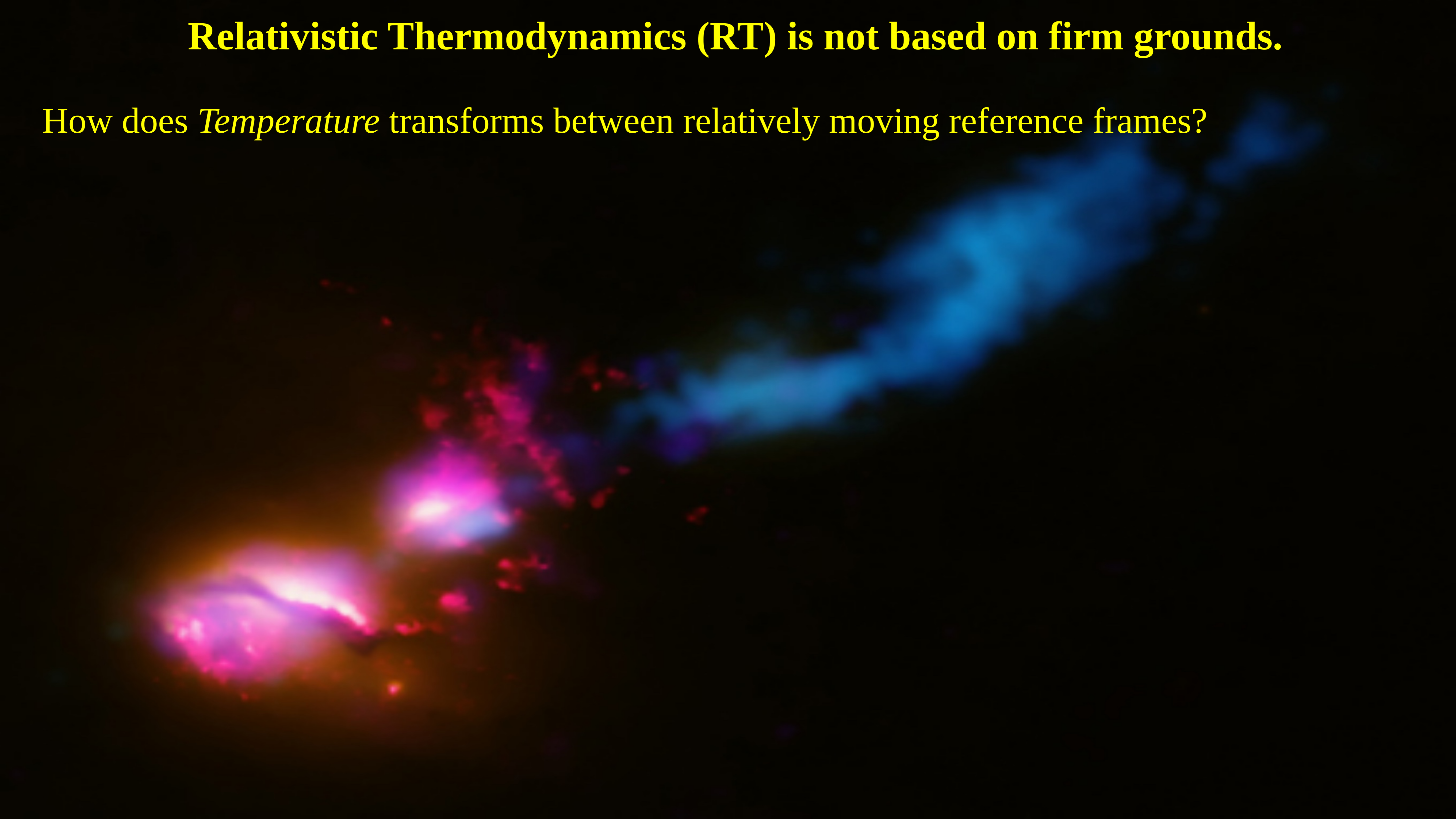


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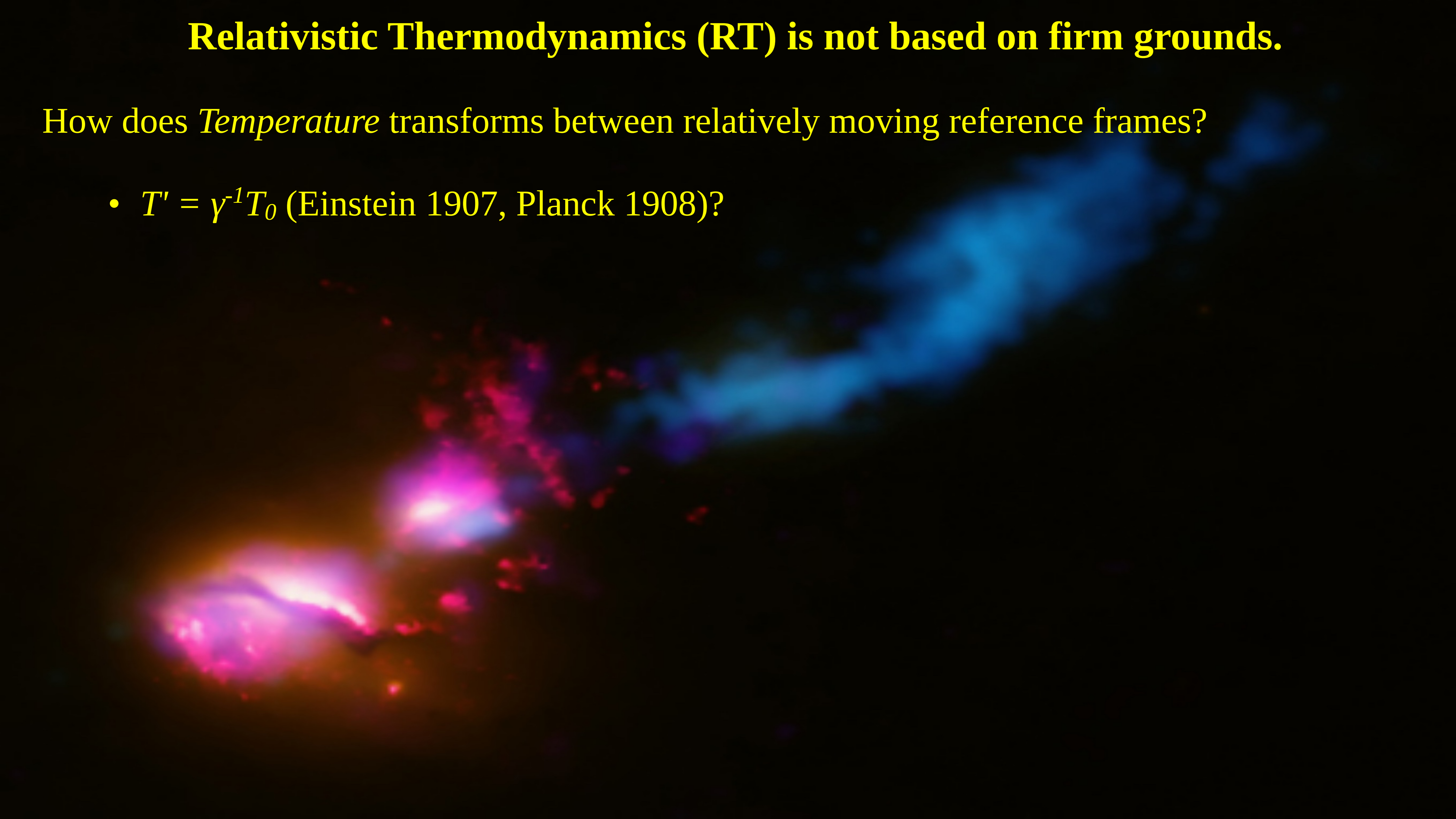
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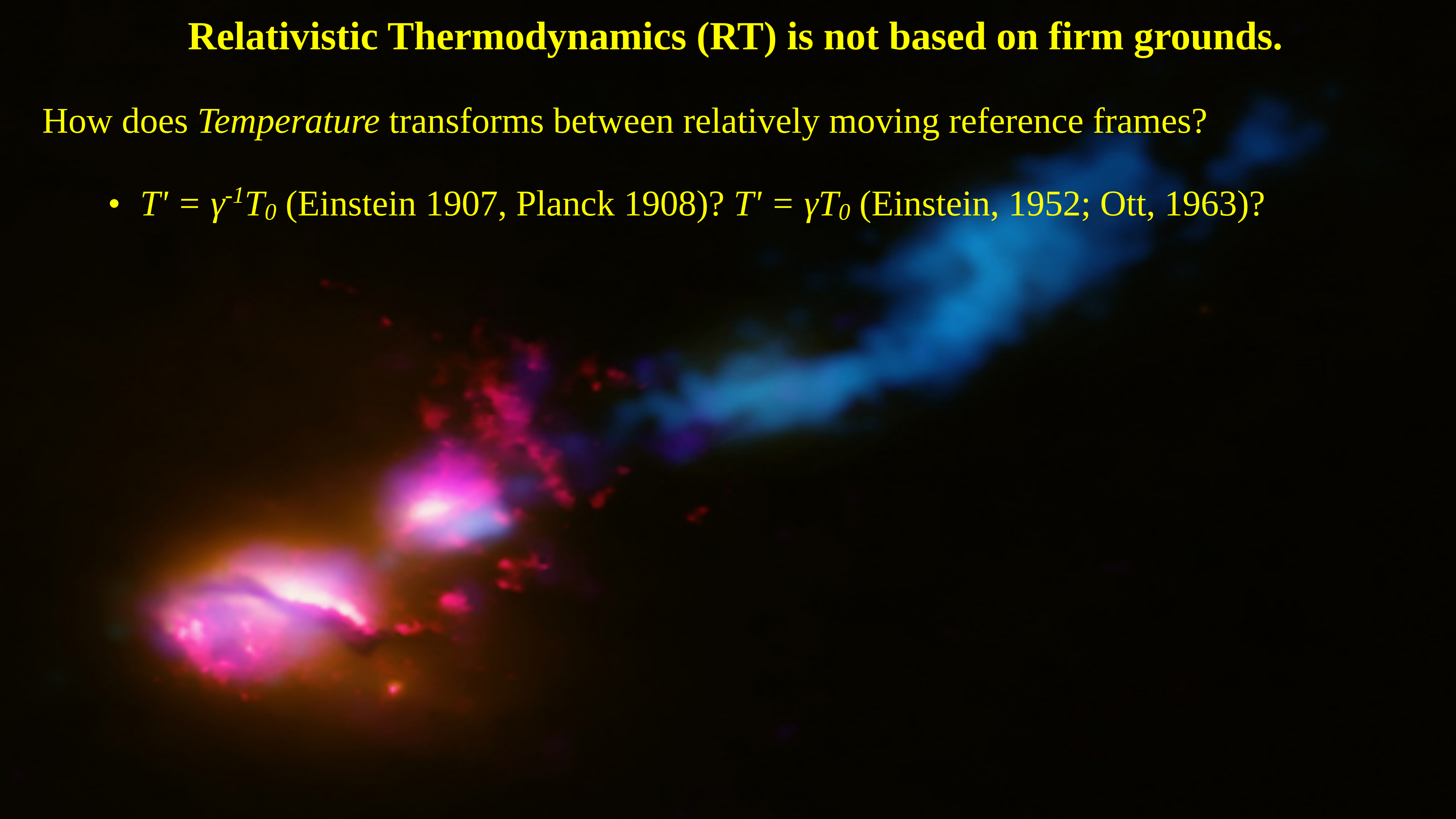
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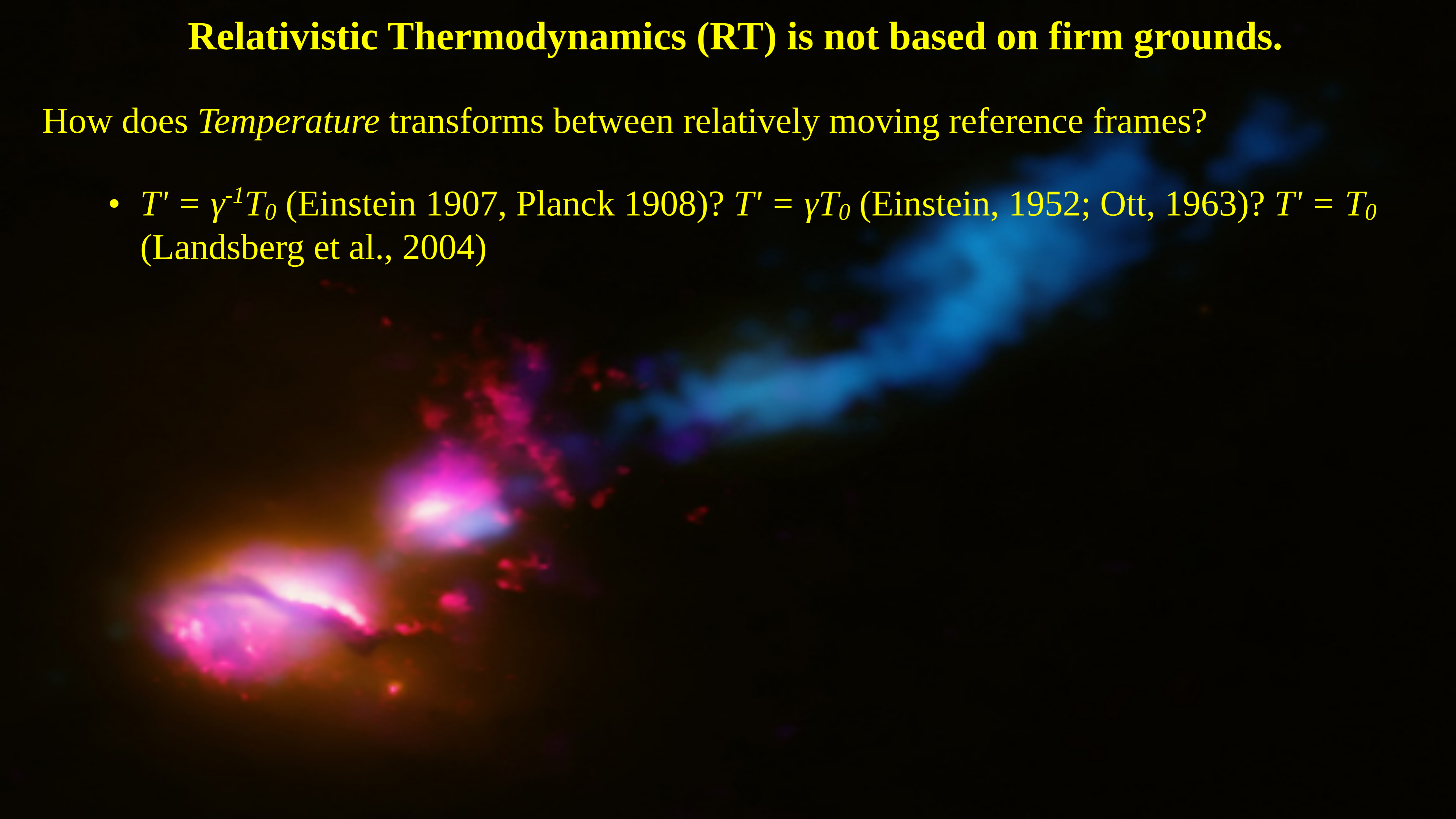
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Classical Thermodynamics only holds for Galileian transformations (Landsberg, 2003).

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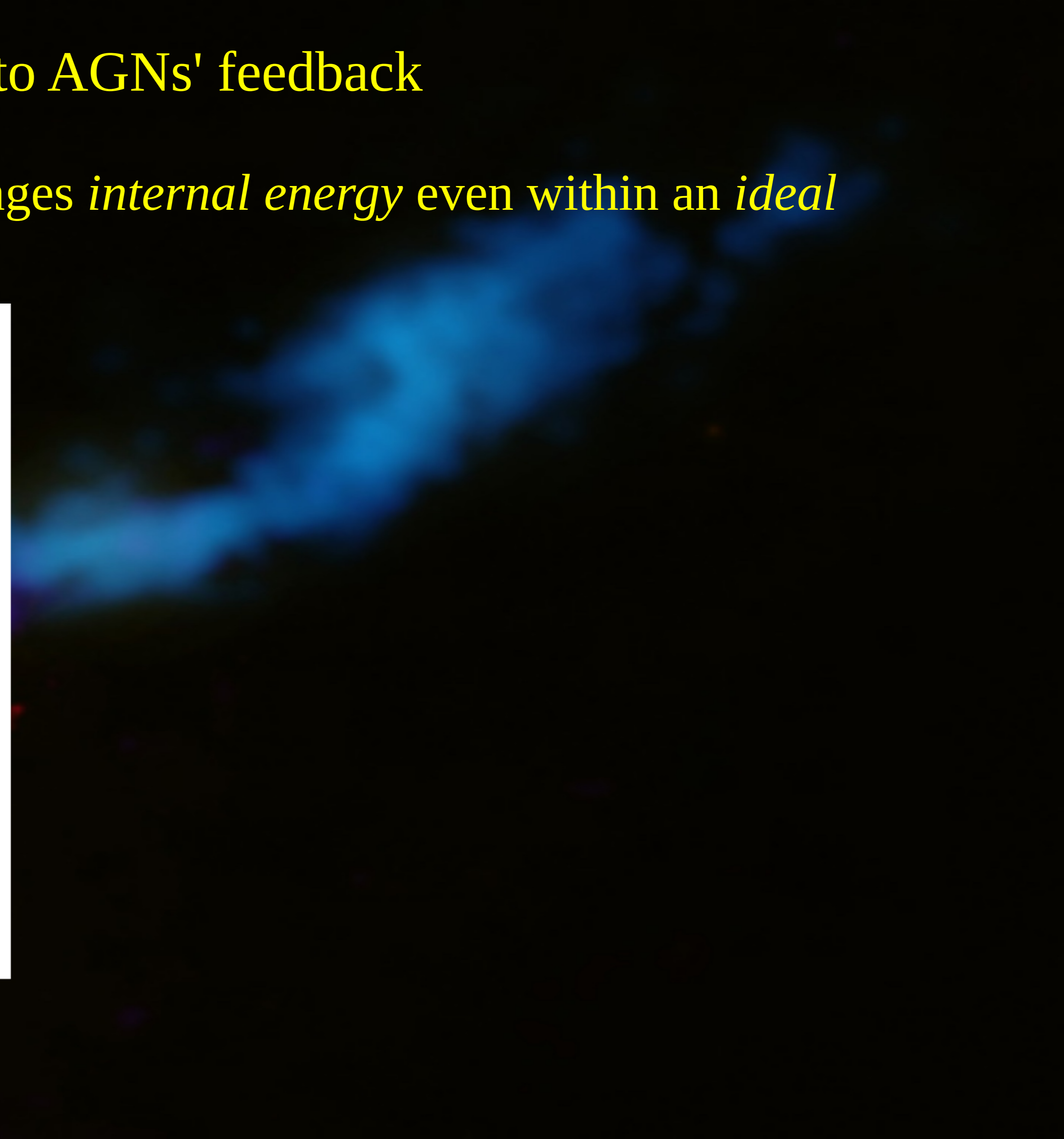
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Laboratory frame

$\beta \sim 1$

$T_{\text{jet, lab}}$

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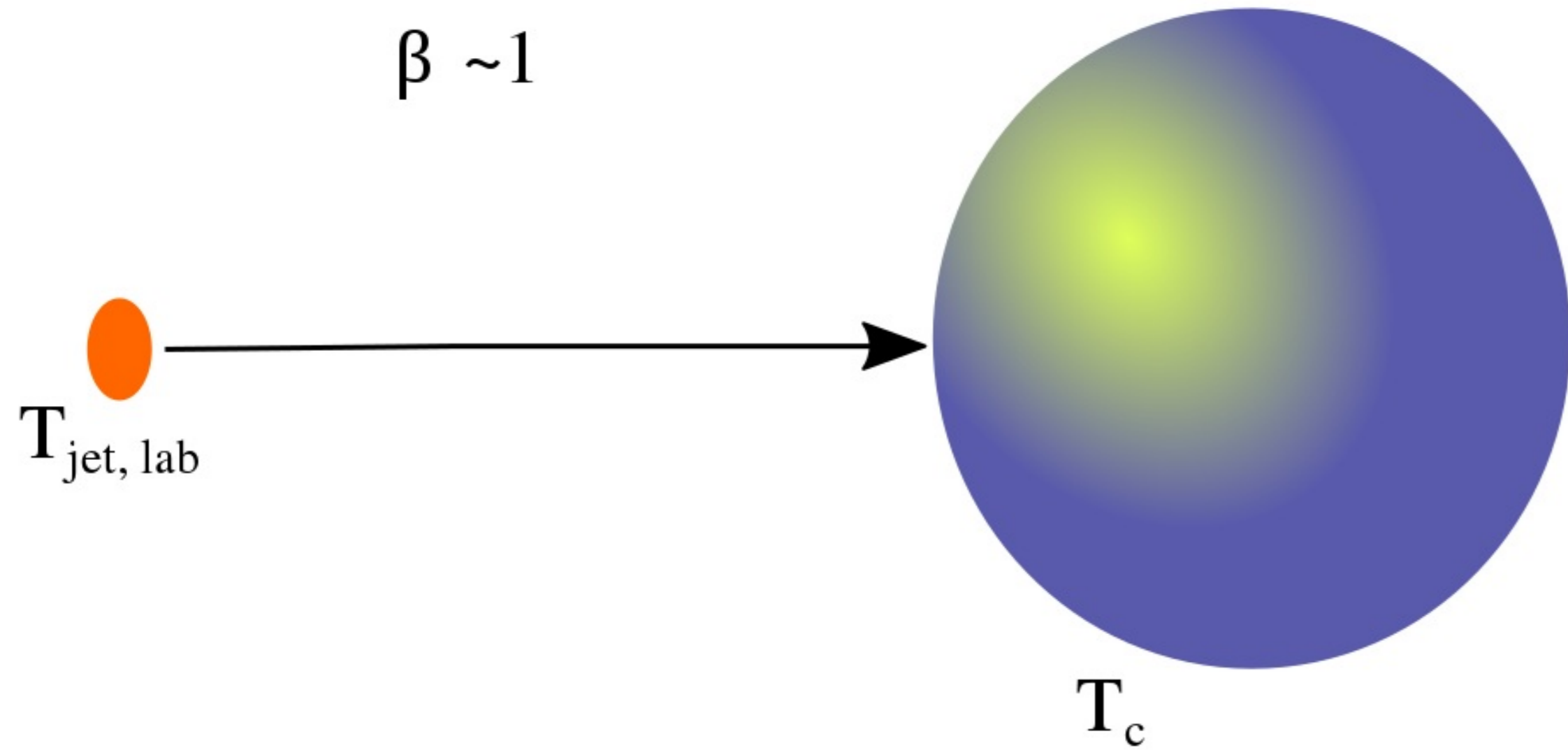


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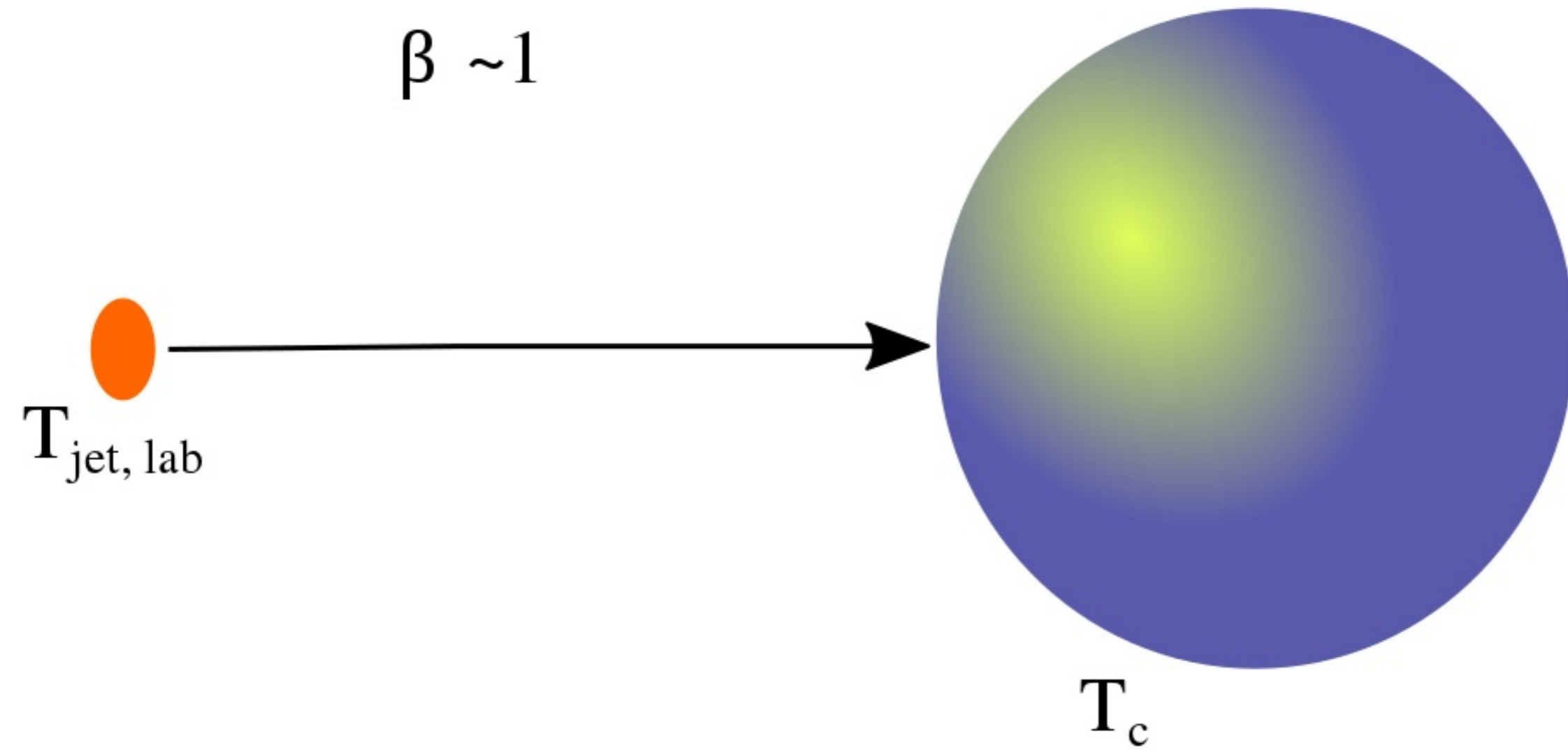


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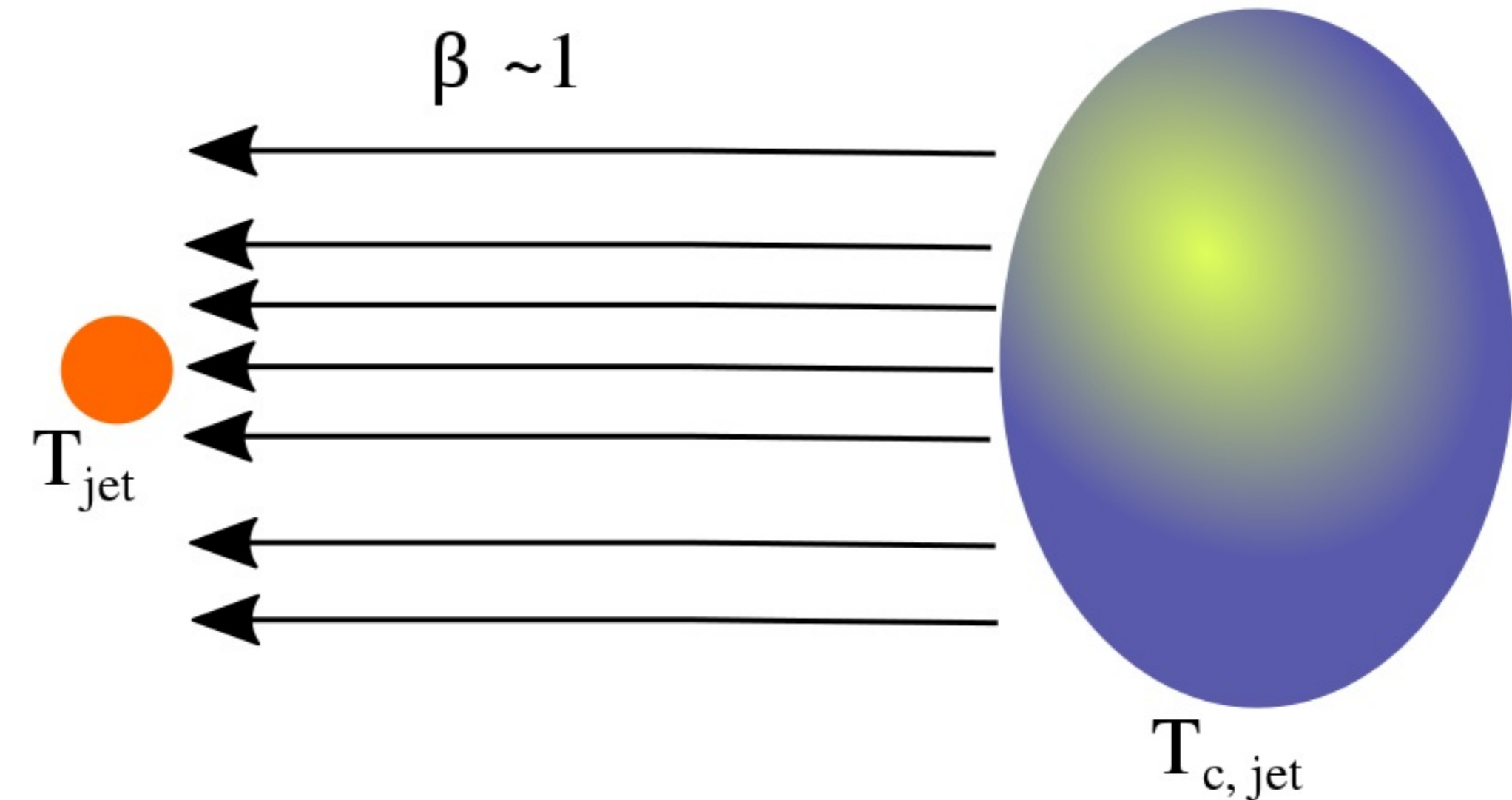
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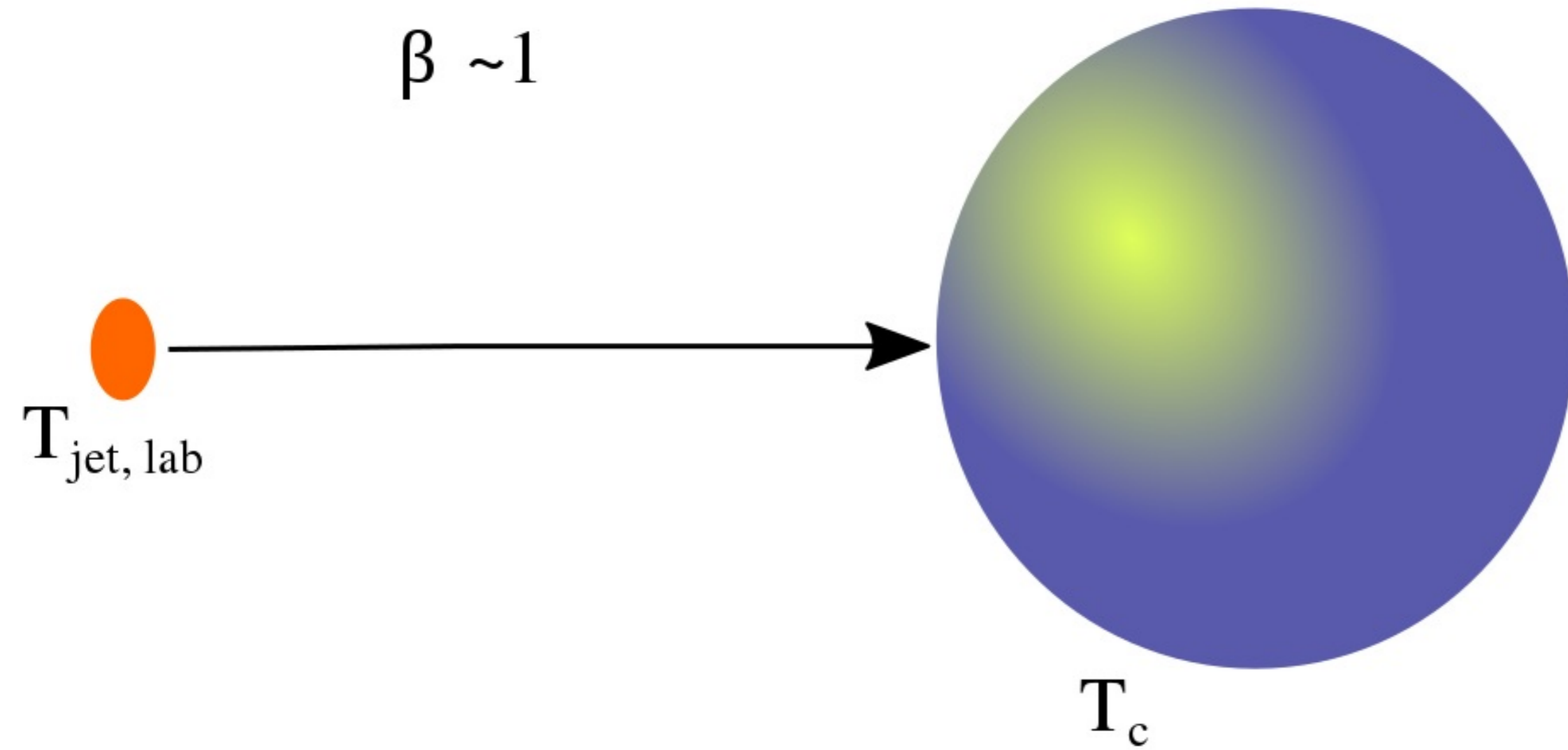


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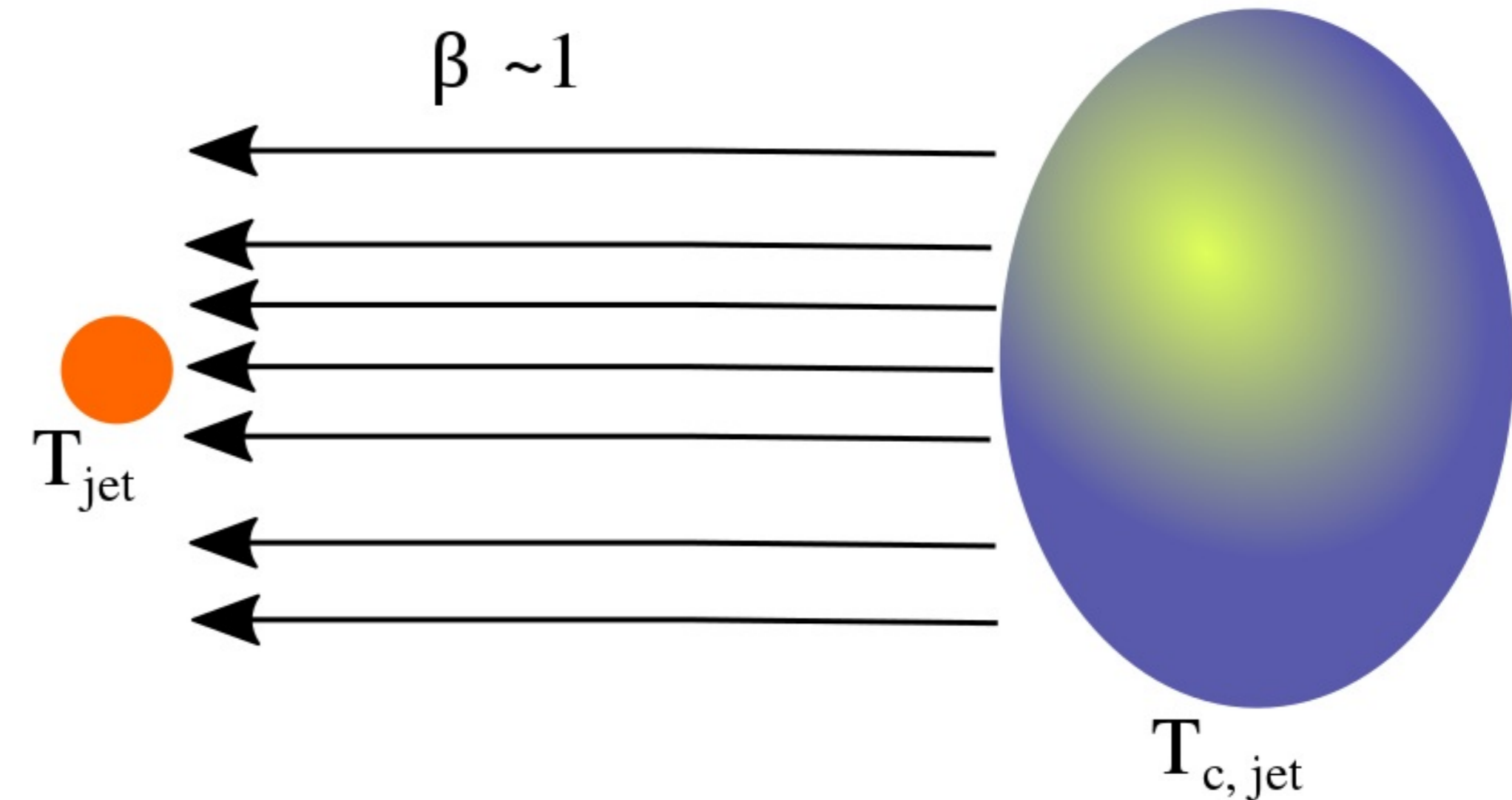
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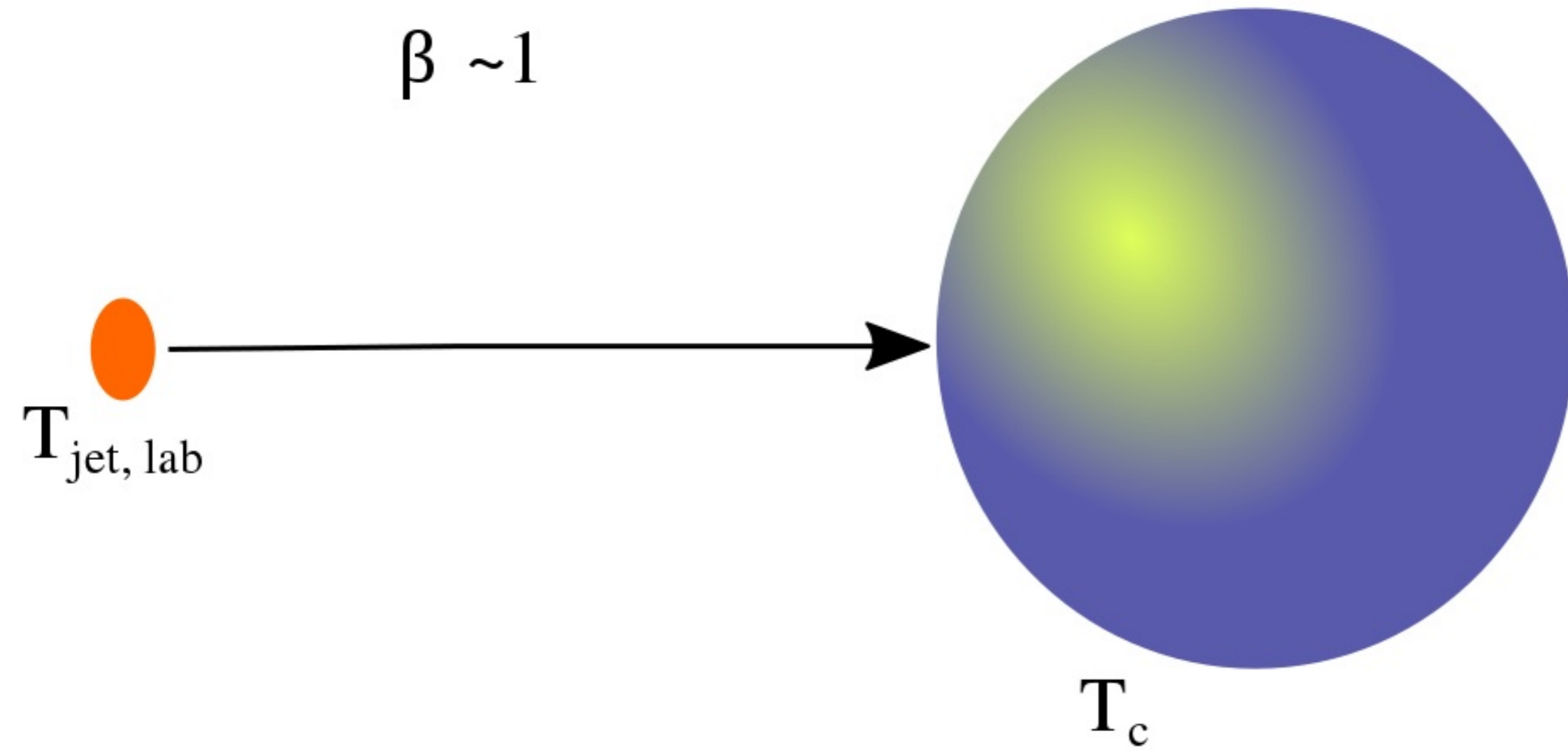
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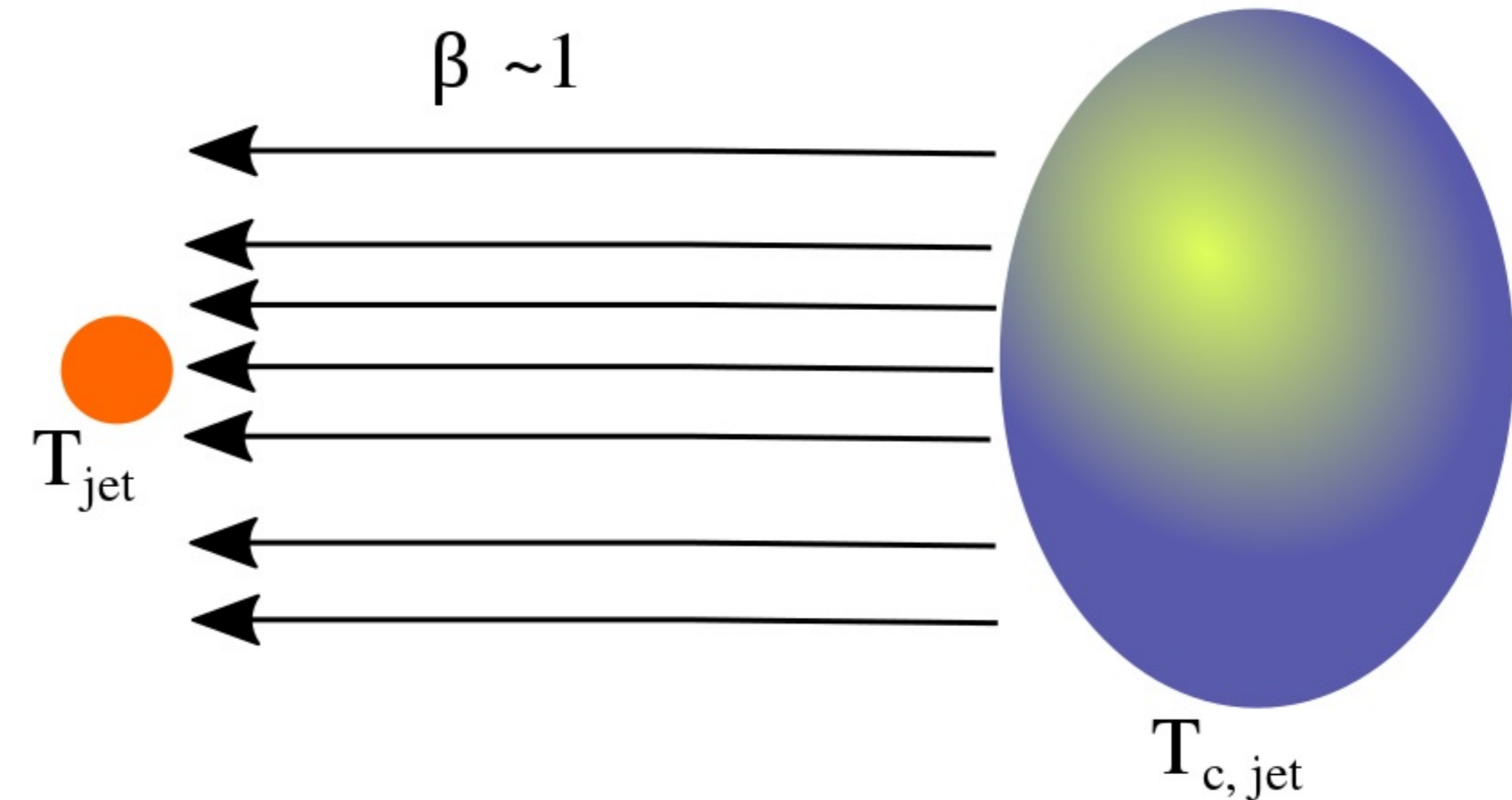
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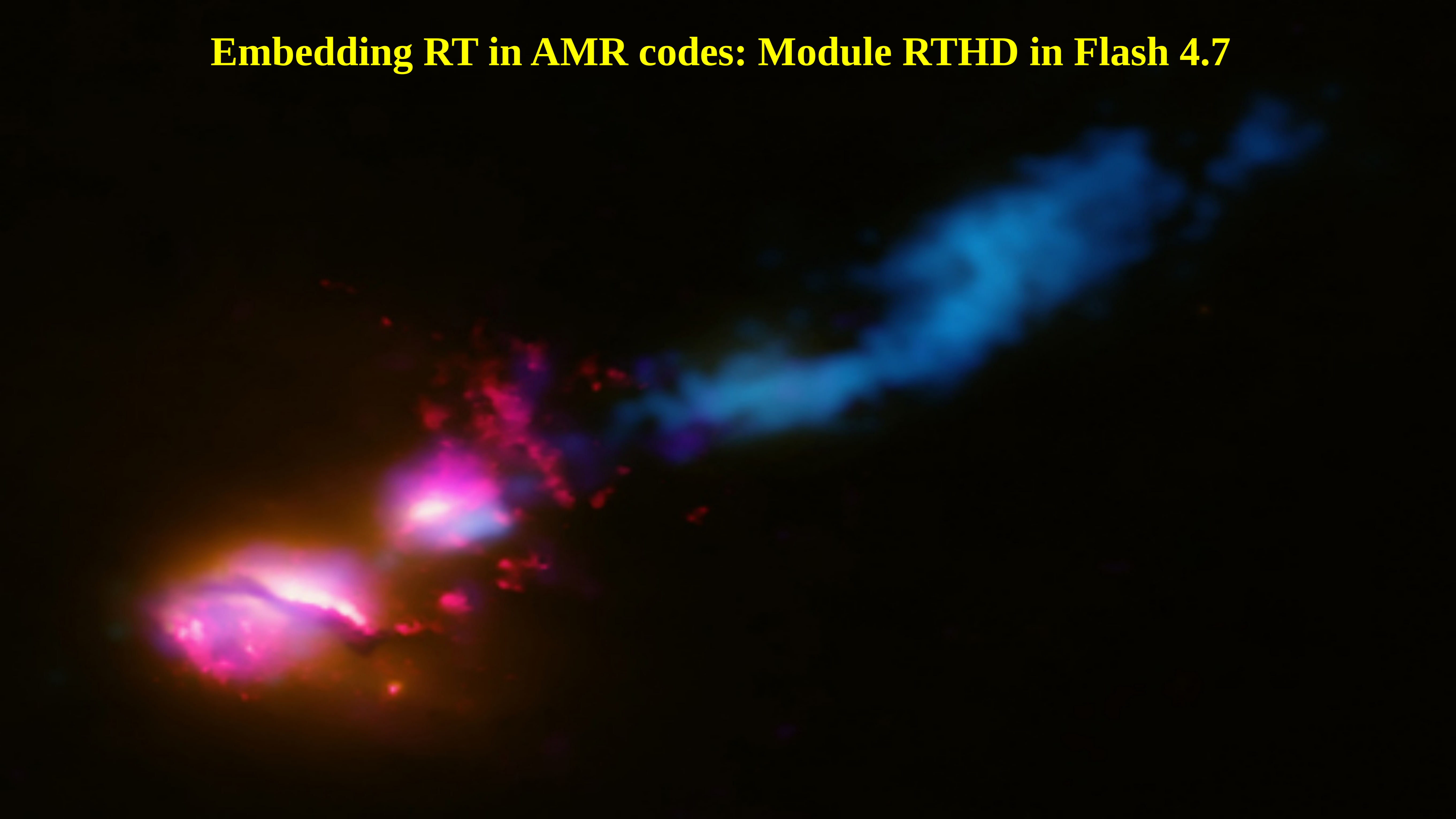


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Actual value of T_c determines the *excitation temperature* of observed fluorescence lines.

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Main target: Allow different $f(\gamma)$ and predict continuum emission (*agnpy*) and line shapes.



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