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Synthetic Spectroscopy Of Near-Chandrasekhar-Mass Type Ia Supernovae From The Double-Degenerate Channel

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Type Ia supernovae (SNe Ia) are the result of the explosion of carbon-oxygen white dwarfs (WDs). SNe Ia inform the rate of acceleration of the universe and the Hubble tension. Yet, the nature of their stellar progenitors remains a subject of active investigation. The canonical single-degenerate channel, consisting of a WD rapidly accreting from a non-degenerate star, is widely invoked to explain the origin of near-Chandrasekhar SNe Ia. In this work we suggest that the merger of two white dwarfs through the double-degenerate channel may instead be the origin of the majority of near-Chandrasekhar mass SNe Ia. I will present synthetic spectra and classifications from hydrodynamical models of these double-degenerate near-Chandrasekhar mass events.