

## EXPLORING THE DIFFUSION INDUCED NOVA SCENARIO

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The early study by Iben & MacDonald (1986) has suggested that white dwarfs formed with thin He buffers might undergo CNO-flashes as a consequence of element diffusion (i.e. a "diffusion induced nova"). This study was based on artificial white dwarf models and, consequently, is not clear whether such events can occur in realistic models. We present an scenario leading to white dwarf with very thin He-buffers which undergo diffusion nova events during their cooling sequences. We compare our results with the previous study and explore the range of masses, metallicities and helium buffer thicknesses for which this CNO-flashes are expected to occur. Finally, we discuss the expected lightcurves, characteristics and chemical abundances expected from this events.