

SN 2005gj: Evidence for LBV supernovae progenitors?

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There is mounting observational evidence in favour of Luminous Blue Variables (LBVs) being the direct progenitors of supernovae. Here we present possibly the most convincing evidence yet for such progenitors. We find multiple absorption component P-Cygni profiles of hydrogen and helium in the spectrum of SN-2005gj, which we interpret as being an imprint of the progenitor's mass-loss history. Such profiles have previously only been detected in Luminous Blue Variables. This striking resemblance of the profiles, along with wind velocities and periods consistent with those of LBVs leads us to connect SN-2005gj to an LBV progenitor.

Reference: Accepted as a letter to A&A, arXiv:0804.2392

Status: Manuscript has been accepted

Weblink: <http://au.arxiv.org/abs/0804.2392>

Comments:

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