The OB-runaways of R136 - a dynamical fingerprint of massive star formation?

M. North*, A. Gualandris, M. Gieles, and V. Hénault-Brunet

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Please check out my poster:

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To try to answer this question we are:

- ➢ Using NBODY6

- ➢ Tracking the ejection mechanism

- ➢ Tracking the type of ejected object

- ➢ Recording stellar spin & ejection velocity

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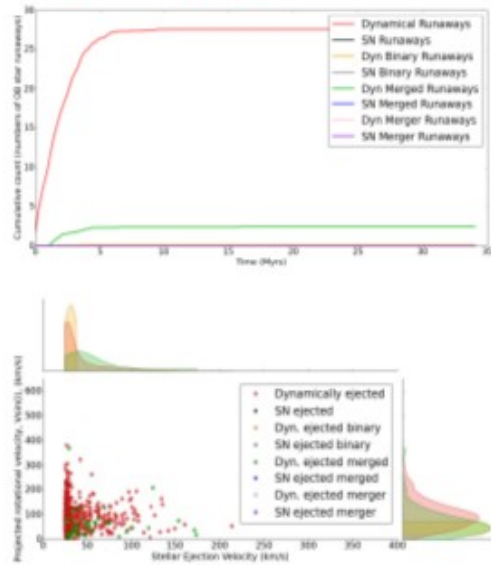
3.1 High density, no primordial binaries

Figure 1. *top panel:* OB–runaway population growth v time. *bottom panel:* $V_{\rm rot}$ versus $V\sin i$.

3.2 Low density, primordial binary fraction
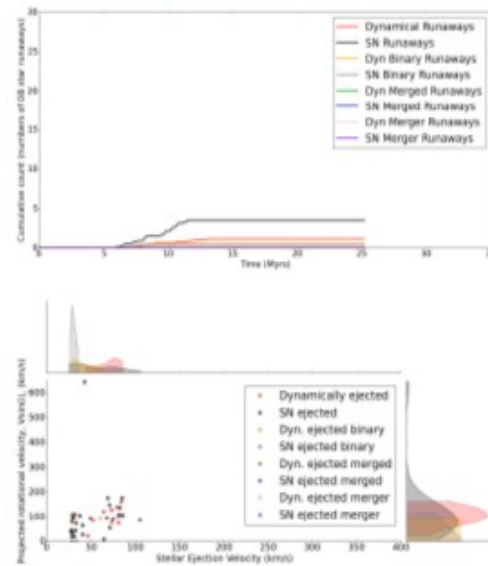
Figure 2. *top panel:* OB–runaway population growth v time. *bottom panel:* $V_{\rm rot}$ versus $V\sin i$.

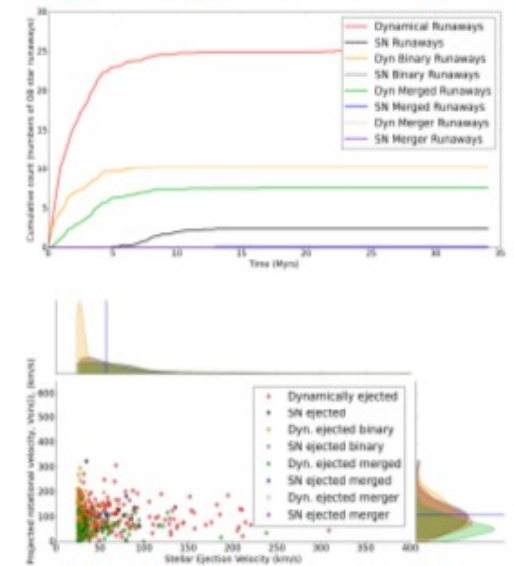## 3.3 High density, primordial binary fraction

Figure 3. *top panel:* OB–runaway population growth v time. *bottom panel:* $V_{\rm rot}$ versus $V\sin i$.

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These plots definitely suggest:

"OB-runaways do provide a dynamical fingerprint"

Please do take a look, I hope you'll agree

Feel free to ask any questions

Thank you for listening!