Who I am

Luca Battistella

- Program Associate – EGN (until Mar, 23), office 307
- final year PhD at Imperial College London
  supervisor: Cristina Manolache

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Gromov-Witten theory

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- where is the virtual class supported?

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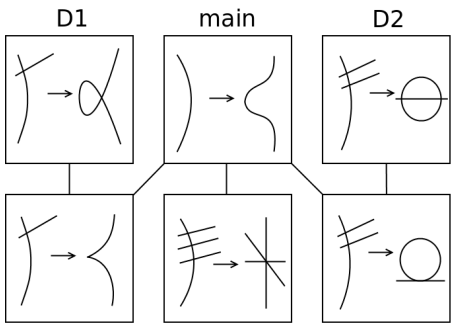
Alternate compactifications

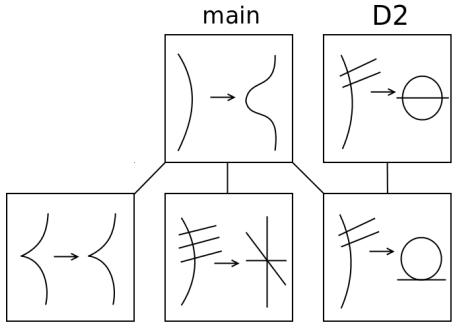
▲ Changing stability condition for a better moduli space ▼

What I like

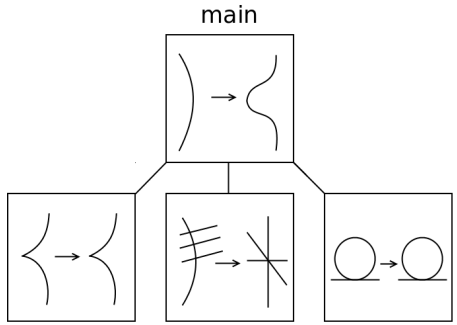
- $g = 1$: Kontsevich stability vs Smyth-Viscardi (m)-stability



(a) $\overline{\mathcal{M}}_1(\mathbb{P}^2, 3)$



(b) $\overline{\mathcal{M}}_1^{(1)}(\mathbb{P}^2, 3)$



(c) $\overline{\mathcal{M}}_1^{(2)}(\mathbb{P}^2, 3)$

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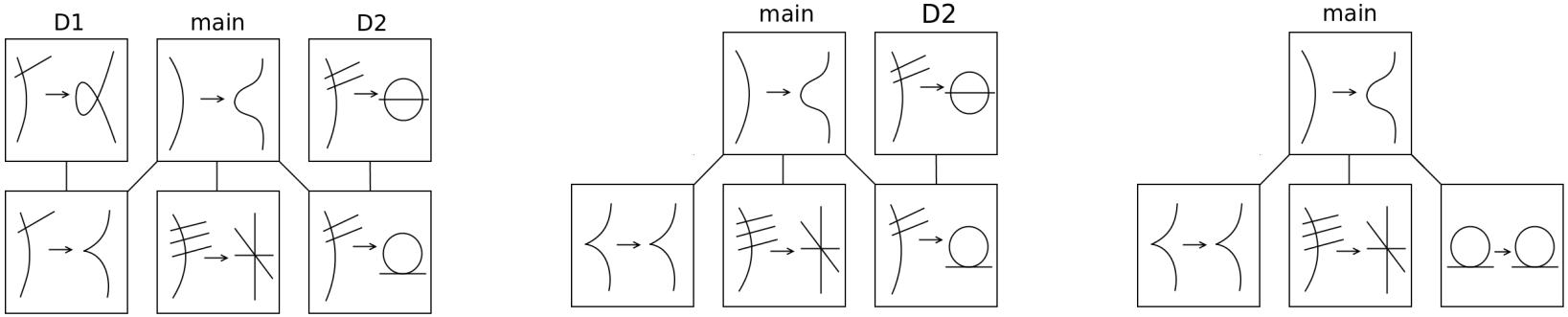

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Figure: from M. Viscardi, "Alternate compactifications of the space of genus one maps"

$\Rightarrow$ reduced invariants of $X_5 \subseteq \mathbb{P}^4$ from cuspidal curves (w/ F. Carocci, C. Manolache)

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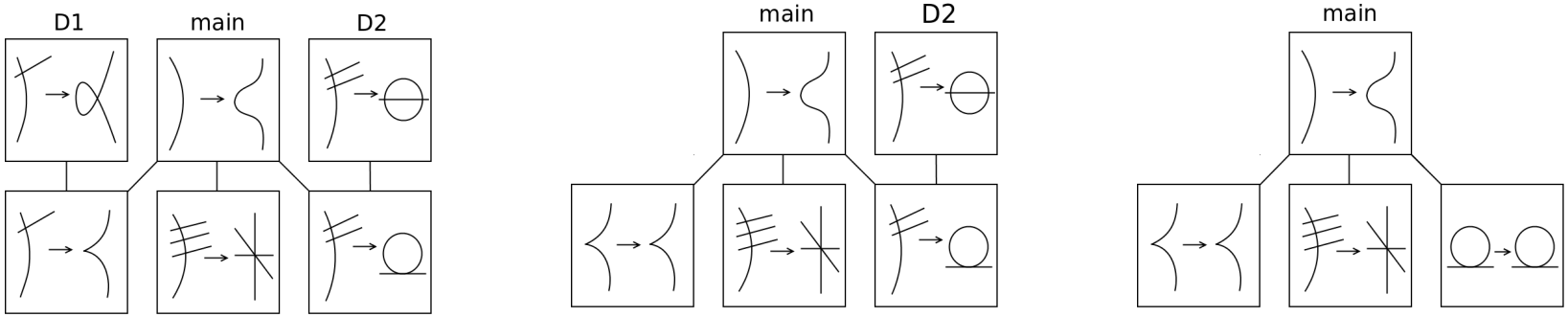

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Less rational tails $\Rightarrow$ less bdry contributions $\Rightarrow$ easier formulae!

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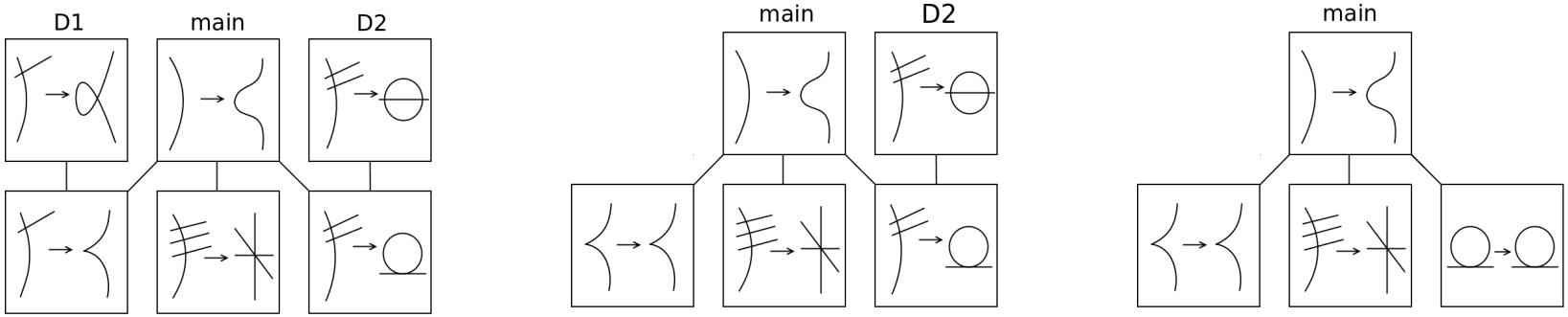

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$\Rightarrow$ quasimap-Lefschetz (w/ N. Nabijou)