

# Miami Physics Conference 2022

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Title: Laurent Deformations of Mirror Models

Calabi–Yau hypersurfaces in toric spaces of general type (encoded by certain non-convex polytopes) are degenerate but may be smoothed by rational anticanonical sections. Nevertheless, gauged linear sigma model phases and an increasing number of their classical and quantum data are just as computable as for their siblings encoded by reflexive polytopes, and they all have transposition mirrors. Showcasing Calabi–Yau hypersurfaces in Hirzebruch scrolls shows this class of constructions to be infinitely vast, yet amenable to several well-founded algebro-geometric methods of analysis. This talk will include joint work with Per Berglund, as reported in part: [arXiv:1606.07420](https://arxiv.org/abs/1606.07420), [arXiv:1611.10300](https://arxiv.org/abs/1611.10300) and [arXiv:2205.12827](https://arxiv.org/abs/2205.12827).