

**EMBEDDING ELLIPSOIDS IN THE ONE POINT BLOWUP OF  $\mathbb{C}P^2$ :  
SYMMETRIES AND RECURSIVE PATTERNS**

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Abstract: This talk will explain work stemming from a group project (with Bertozzi, Holm, Maw, Mwakoma, Pires, and Weiler), that investigated the ellipsoidal embedding capacity functions for the family of one point blowups of  $\mathbb{C}P^2$ . This problem turns out to have unexpected arithmetic structure, leading via further work with Magill and Weiler, to the discovery of an intricate fractal pattern of interweaving staircases.