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Forty families of log symplectic forms on CP^4

I will explain how the local Torelli theorem from Brent Pym's talk describes (not necessarily toric) deformations of toric log symplectic forms on complex projective spaces. I will introduce smoothing diagrams, which are certain graphs with decorations that encode such deformations, discuss combinatorial rules that govern them, and present a complete classification of smoothing diagrams for the case of CP^4 . The obtained list of 40 smoothing diagrams amounts to 40 families of log symplectic forms on CP^4 , most of which are new. Time permitting, I will discuss how to read off geometric properties of the obtained log symplectic forms from the smoothing diagrams. This is joint work with Brent Pym and Travis Schedler.