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Sergiy Koshkin* (koshkins@uhd.edu), 1 Main Street, University of Houston-Downtown,
Department of Mathematics and and Statistics, Houston, TX 77002. *Imaginary Triangles,
Pythagorean Theorems and Algebraic Geometry*. Preliminary report.

We study families of triangles with two commensurable angles. Just like the family of right triangles, which is parametrized by a plane algebraic curve whose implicit equation is given by the Pythagorean theorem, they admit "Pythagorean theorems" of their own. We extend the notion of triangle to "imaginary triangles" with complex valued sides and angles, and apply the theory of plane Cremona transformations to find them recursively. (Received August 23, 2017)