QUIDDITIES OF POLYGON DISSECTIONS

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Abstract. I will begin with a brief history of the classical theory of polygon dissections, including their bivariate and multivariate recursion relations, and the use of Lagrange-Bürmann inversion to convert these relations to explicit enumerations such as the Kirkman-Cayley formula. I will then define and discuss the "quiddity" of a dissection, a concept introduced by Conway and Coxeter in their study of frieze patterns, a certain class of equations in $\mathrm{SL}(2,\mathbb{Z})$, and recently extended by Ovsienko to study a more general class of equations. I will conclude by describing joint work with Ovsienko on the enumeration of quiddities.