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Adriana Salerno*, 3 Andrews Rd, Lewiston, ME 04240, and **Juergen Kritschgau**. *Origami constructions of rings of integers of imaginary quadratic fields.*

In the making of origami, one starts with a piece of paper, and through a series of folds along seed points one constructs complicated three-dimensional shapes. Mathematically, one can think of the complex numbers as representing the piece of paper, and the seed points and folds as a way to generate a subset of the complex numbers. Under certain constraints, this construction can give rise to a ring which we call an origami ring. We will talk about the basic construction of an origami ring due to Buhler, Butler, de Launay, and Graham, and further extensions and implications of these ideas in algebra and number theory. In particular in this talk, we show that it is possible to obtain the ring of integers of an imaginary quadratic field through an origami construction. (Received September 25, 2017)