1145-VO-713　　　　**Oliver Thakar*** (`olliet19@parkschool.net`) and **Katherine Socha** (`ksocha@parkschool.net`). *Enchanting Geometry.* Preliminary report.

Mathematicians know that developing and proving theorems both require creative thinking, but many of our peers in other lines of work have not experienced mathematics as creative thinking about beautiful ideas. In this talk, we present one beautiful geometric result and coax the audience into developing a particularly elegant argument. The result: that the lune of Hippocrates, a shape bounded by two circular arcs, is quadrable — equal in area to a constructible square. Join us in the talk to develop the argument! This exploration is one example from a guided journey through geometry: a book in progress, intended to enchant the general reader into discovering elegance and creativity through geometry. (Note: this is a student-led presentation.) (Received September 13, 2018)