1145-11-2224 Piper H* (paharron@math.hawaii.edu) and Christelle Vincent

(christelle.vincent@uvm.edu). Joint Shapes of Quartic Fields and Their Cubic Resolvents.

In studying the (equi)distribution of shapes of quartic number fields, one relies heavily on Bhargava's parametrizations which brings with it a notion of resolvent ring. Maximal rings have unique resolvent rings so it is possible to live a long and healthy life without understanding what they are. The authors have decided, however, to forsake such bliss and look into what ever are these rings and what happens if we consider their shapes along with our initial number fields. What indeed! Please stay tuned. (Received September 25, 2018)