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Conductors and minimal discriminants are two measures of degeneracy of the singular fiber in a family of hyperelliptic curves. In genus one, the Ogg–Saito formula shows that these two invariants are equal, and in genus two, Qing Liu showed that they are related by an inequality.

In this talk, we will show that Liu’s inequality extends to hyperelliptic curves of arbitrary genus in the absence of wild ramification phenomena. The key ingredients in this proof are an explicit analysis of regular models arising from Jung’s method of resolving surface singularities, and an understanding of the behaviour of associated metric trees under a natural inductive process. Time permitting, we will also outline work in progress joint with Andrew Obus to extend this to all odd residue characteristics. (Received January 22, 2019)