1163-14-541   **Andrew Obus*** (`andrewobus@gmail.com`) and **Padmavathi Srinivasan**.
Conductor-discriminant inequality for superelliptic curves.

Let K be a complete discretely valued field with residue characteristic p. For a superelliptic curve X given by an affine equation $y^n = f(x)$ with $p \nmid n$, we show that the (negative) Artin conductor of the minimal regular model of X over $\mathcal{O}_K$ is bounded above by $(n-1)v_K(\mathrm{disc}(f))$. This generalizes earlier work by the authors in the hyperelliptic case, as well as the thesis of Kohls where a similar inequality is given for the conductor exponent rather than the Artin conductor. (Received September 08, 2020)