

**- Research Talk -**  
**Valuations on smooth varieties via spaces of arcs**

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**Abstract:**

I will describe a dictionary between the study of singularities via divisorial valuations and that via cylinders in spaces of arcs. To illustrate this point, I will give an application to the study of an invariant of singularities, the minimal log discrepancy. If time allows, I will explain some of the subtleties that arise in the case of an ambient singular variety.