

## Graded algebras associated to valuations

**Josnei Antonio Novacoski<sup>1</sup>,**

<sup>1</sup> UFSCar

In this talk we will discuss the concept of graded algebras associated to valuations. We discuss how these objects can be used to prove resolution of singularities in particular cases and how one can hope to extend this idea to the general case. We will also present a criterion to when the graded algebra of an upper valuation ring is finitely generated over the graded algebra of a lower valuation ring.