

# Integrable Systems on (Multiplicative) Quiver Varieties

*jeudi 28 avril 2022 14:00 (1 heure)*

Following the pioneering work of Wilson who realized the phase space of the (classical complex) Calogero-Moser system as a quiver variety, Chalykh and Silantyev observed in 2017 that various generalizations of this integrable system can be constructed on quiver varieties associated with cyclic quivers. Building on these results, I will explain how such systems can be visualized at the level of quivers, and how to prove that we can form (degenerately) integrable systems. I will then outline how this construction can be adapted to obtain generalizations of the Ruijsenaars-Schneider system if one uses multiplicative quiver varieties associated with the same quivers. The main tool that I want to advertise is the notion of double (quasi-) Poisson brackets due to Van den Bergh. This talk is partly based on previous works with Oleg Chalykh and Tamás Görbe.

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