# Linearization of Nonautonomous Differential Inclusions

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**Abstract**

In this talk we generalize the results from [1] for linearization of the dynamics of non-smooth control systems to the nonautonomous case. To this end, we consider nonautonomous differential inclusions and study the Clarke tangent cone to the set of all admissible trajectories starting from a fixed point. Our approach is based on important results for measurability of set-valued mappings, the classical Filippov's theorem and subtransversality of closed sets.

## References

[1] Bivas, M., Krastanov, M., Ribarska, N.. Linearization of differential inclusions. Serdica Mathematical Journal, 49, 1-3, Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, 2023.