

## Terwilliger algebras and the Weisfeiler-Leman stabilization

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### Abstract

Given a finite connected graph  $\Gamma$  and a fixed vertex  $x_0$  of  $\Gamma$ , the Terwilliger algebra  $T^{(x_0)}$  is introduced to analyse local symmetries of  $\Gamma$  with respect to  $x_0$  by the use of its representations [1]. In this talk, we revisit  $T^{(x_0)}$  from the viewpoint of the Weisfeiler-Leman stabilization [2].

### References

- [1] Paul Terwilliger, The subconstituent algebra of an association scheme I. *J. Algebraic Combin.*, 1 (1992), 363-388.
- [2] Igor Faradjev, "Symmetry vs Regularity". How it started and what it led to; slides: <https://www.iti.zcu.cz/wl2018/slides.html>.