

Submission for an invited session, organized by Ana Cristina Casimiro  
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## Representations of the Higman-Thompson groups

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Representation theory can be a powerful tool for studying the properties of certain algebraic structures. The Higman-Thompson groups are a family of infinite, albeit finitely presented, discrete groups. Nekrashevych [1] first introduced a representation of the Thompson groups, which was later extended to a family of representations by Barata and Pinto [2] and further to a family of representations of the Higman-Thompson groups by Araújo and Pinto [3]. The aim of the talk is to provide some insight on how these representations arise and how to determine whether or not two of them might be unitarily equivalent.

### References

- [1] Nekrashevych, V., *Cuntz-Pimsner algebras of group actions*, J. Oper. Theory, no. 52, 223 - 249 (2004).
- [2] Barata, M., Pinto, P., *Representations of Thompson Groups from Cuntz algebras*, J. Math. Anal. Appl., no. 478, 212 - 228 (2019).
- [3] Araújo, F., Pinto, P., *Representations of Higman-Thompson Groups from Cuntz Algebras*, arXiv:2011.13679 (2020).