

# UNIFORM TRANSIENCE OF SPHERICALLY SYMMETRIC GRAPHS

RADOSŁAW K. WOJCIECHOWSKI

We will investigate the notion of uniform transience as discussed in [1] for weakly spherically symmetric graphs. The overall goal is to obtain a characterization of uniform transience for this case to complement the characterizations of transience and stochastic completeness for weakly spherically symmetric graphs as presented in Chapter 9 of [2] and Lecture 13 of [3].

This project is suited for 3 to 4 students.

## REFERENCES

- [1] Matthias Keller, Daniel Lenz, Marcel Schmidt and Radosław K. Wojciechowski, *Note on uniformly transient graphs*, Rev. Mat. Iberoam. **33** (2017), no. 3, 831–860.
- [2] Matthias Keller, Daniel Lenz, Marcel Schmidt and Radosław K. Wojciechowski, *Graphs and discrete Dirichlet spaces*, Grundlehren der mathematischen Wissenschaften, vol. 358, Springer, 2021, 682 pp.
- [3] ISem 26, Lecture Notes, 2023. [https://urldefense.com/v3/\\_\\_https://www.mat.tuhh.de/veranstaltungen/isem26/\\_media/lecturenotes.pdf\\_\\_;!!GekbXoL5ynDpFgM!RmrAN3cGqPz0-GQdRdD3rjDUJ83n7ukvkZnrC\\_7kAjlrQR2WEJWeMX\\_kIYcwmi2FESHQk9xoWnCOSOMLvEUIIjME\\$](https://urldefense.com/v3/__https://www.mat.tuhh.de/veranstaltungen/isem26/_media/lecturenotes.pdf__;!!GekbXoL5ynDpFgM!RmrAN3cGqPz0-GQdRdD3rjDUJ83n7ukvkZnrC_7kAjlrQR2WEJWeMX_kIYcwmi2FESHQk9xoWnCOSOMLvEUIIjME$)