

Oberseminar Winter 2024/25

## Sarnak's Density Conjecture

1. **Anton Deitmar**

*Representation Theory of semisimple Lie groups.* [6]

2. **Paul Vögele**

*Representations of  $p$ -adic groups.* [2, 3]

3. **Giacomo Gavigli**

*Matrix coefficients and the pre-trace formula.* [4] Section 4

4. **Daniel Funck**

*Weak injectivity radius property and spectral geometry.* [4] Sections 5 - 7

5. **Anton Deitmar**

*Bernstein theory and matrix coefficients.* [4] Sections 8 & 9

Further literature: [1, 5, 7]

## References

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- [2] P. Cartier, *Representations of  $p$ -adic groups: a survey*, Automorphic forms, representations and  $L$ -functions (Proc. Sympos. Pure Math., Oregon State Univ., Corvallis, Ore., 1977), Proc. Sympos. Pure Math., XXXIII, Amer. Math. Soc., Providence, RI, 1979, pp. 111–155.
- [3] J. Fintzen, *Representations of  $p$ -adic groups*, available at [https://www.math.uni-bonn.de/people/fintzen/Fintzen\\_CDM.pdf](https://www.math.uni-bonn.de/people/fintzen/Fintzen_CDM.pdf).
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- [6] Anthony W. Knap, *Representation theory of semisimple groups*, Princeton Landmarks in Mathematics, Princeton University Press, Princeton, NJ, 2001. An overview based on examples; Reprint of the 1986 original.
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