

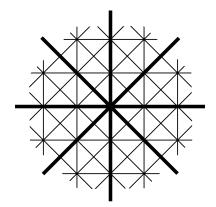
## Dynamics and Lie Theory Seminar

## Counting geodesics on Grassmanians of planes

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Date: February 10th, 2022 Time: 15:00

Abstract. By counting geodesics we mean obtaining a nice description of the inverse image of the Riemannian exponential map. In this talk we will show how our general results on compact symmetric spaces [1] allows us to count geodesics on Grassmanians of real planes (also complex and quaternionic planes, if time allows) by using nice diagrams such as the one below:



These examples will appear in [1], joint work with M. Patrão.

## References

- [1] L. Seco, M. Patrão: *Counting geodesics on compact symmetric spaces*, (work in progress), 2022.
- [2] L. Seco, L.A.B. San Martin: Counting geodesics on compact Lie groups, Diff. Geom. Appl. 56 (2018) 1-19.
- [3] T. Sakai: On cut loci of compact symmetric spaces, Hokkaido Math. J. 6 (1977), 136-161.