## Insalate di Matematica *presents*

## GGT tapas for lunch



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Università degli Studi di Milano Bicocca -Universidad de Zaragoza **14:00 - 21/04/2022** U5 - Room 3014 and Webex meeting

Università di Milano Bicocca

## **Abstract**

In the last decades Geometric Group Theory, namely the study of infinite groups via geometric means, has spread out. Being at the intersection among group theory, geometry, combinatorics and much more, it has proved to be a very fertile approach, allowing a deep understanding of the properties of infinite groups. During this talk the basic ideas of geometric group theory will be introduced, together with some of the most common tools that can be used. Some of them will be introduced using right-angled Artin groups (RAAGs) as an example. They are one of the most important families of groups studied in geometric group theory and various generalizations have been defined through the years. The last part of the talk will introduce also one of such generalizations, namely twisted right-angled Artin groups (TRAAGs). This last part is a joint work with S. Blumer, I. Foniqi, C. Quadrelli and T. Weigel.



## **Keywords:**

Geometric group theory · RAAGs · twisted RAAGS · graphs · CW-complexes · classifying spaces · group actions

"Obvious" is the most dangerous word in mathematics. - Eric Temple Bell

