In social science, a longstanding debate has developed around the methodological choices that drive empirical research. Much has been written about what should be considered the realm of observations, what constitutes a unit of analysis, how we should measure it, how to abstract these measurements in formalised schema that can represent social reality, and how to build theories that can be transposed across settings and explain or predict social phenomena. The argument has sometimes reached harsh and fiery moments, building boundaries around methods and disciplines that are sometimes so hard to cross that they seem more like solid walls rather than matters of scientific discussion. Network science has always spanned across boundaries, both disciplinary and methodological. Despite its stereotyped perception as a hard, mathematical, arid, and abstract quantitative approach, or alternatively as a fancy way to visualise data, this unique perspective has long proved to be fertile and versatile in many fields and in combination with many methods. In this talk, I aim to reject the incompatible paradigmatic stances around quantitative and qualitative methods by looking at the peculiar ontological, epistemological, and methodological dimensions of network science.

I will start from the observation that network analysis is not a quantitative method strictly speaking. Although it formalises data into numbers, it radically departs from the classic statistical approaches of categorical and variable analysis, with their foundational assumption of the independence of the units of observations. Network science is a scientific approach interested in studying associations, dependencies, and relations. Regardless of the kinds of phenomena it wants to explain, the foundational elements that characterise such phenomena need to be related to each other, where the pattern of relations is what distinguishes them and what is interesting to study. Actors, however defined, are always entangled in meaningful relations in contextualised settings, and the patterns of such entangled ties are produced by, and conversely shape, structural and cultural mechanisms that regulate social phenomena themselves. Network analysis, by offering analytical tools to measure and model relational patterns, is thus a very useful method for studying social phenomena. To achieve these goals, network analysis can be equally mixed with qualitative methods as well as statistical tools. The flexibility and thick description of qualitative methods can illustrate the relational work that
actors in networks engage with in defining identities, interactions, and network structures, in negotiating cultural conventions, and in exchanging symbolic and material resources.

To illustrate how to mix network analysis with qualitative methods in sociological research, I will present two empirical research examples. The first example combines social network analysis with in-depth interviews in the collection of the egonetworks of 23 men and women living in Milan, Italy. I conducted the research in 2005 and focused on the structure and meaning of friendship: a classic version of name generator, which collected information on the names of each interviewer’s friends, their personal characteristics, and the relationships between all the named friends was matched with an in-depth interview that explored the content, meaning, history, and dynamics of friendship ties. I analysed the data by combining both the network information and the narrative accounts, following a mixed method research design where methods are equivalent and simultaneously used in both data collection and analysis. The example illustrates how actors’ identities are defined and emerge out of interactions and relationships and how these relations overlap in local networks.

The second example enlarges the perspective from individually centred local structures to overlapping networks by looking at various social circles in which individuals are embedded and at symbolic and material resources that circulate within and across them. It does so by looking at the social relations of two street groups involved in illegal activities, again in Milan. I collected data ethnographically by conducting moderate and fully participant observations over an extended period of time in 2000 and 2001 and I used unstructured interviews, in-depth interviews, and a focus group. The research design in this case was predominantly qualitative: I collected and analysed data via qualitative methods and used social network analysis only descriptively to formalise the structure of relationships that street groups activate with other groups and other significant people.

By comparing the two empirical examples, common structural mechanisms of homophily and brokerage emerge, which are compared and contextually discussed. I will conclude the talk by reflecting upon the way in which similar structural mechanism assume different meaning not only depending on the context in which they are activated, but also when the magnifying lens of structural analysis focuses on different levels of granularity.