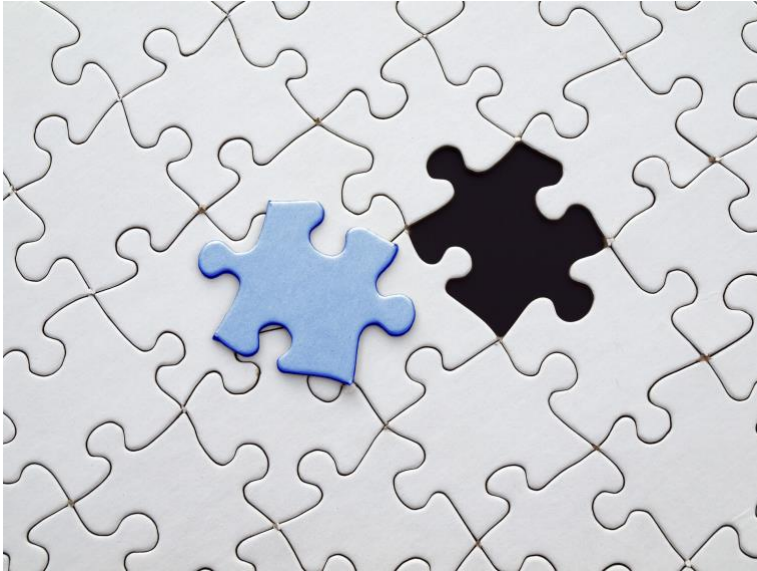


# May 29

Tuesday

## Colloquium Faculty of Computer Science, HSE



**Valentina Kuskova**  
HSE

**In search of missing  
network data:  
applications to  
real-life problems**

Over the years, our ability to impute missing data, including network nodes and edges, has improved significantly. Multiple algorithms of data imputation show excellent results in computer simulations, but when it comes to using them on real-life data, applied to real-life problems, several issues arise. First, no matter how advanced, simulation models still lack the complexity of human relationships, which is often at the forefront of applied social network analysis. Second, different algorithms produce confusing, often conflicting results on real-life data, with no good way to offer good theoretical interpretations. Finally, most algorithms are still rather complex to be implemented by social scientists, who do not have the same programming skills or access to software as computer scientists do.

In this talk, we will look at some real-life problems that arise with missing network data. We will report results on a study that combines real-life data with simulation techniques to address the impact that missing nodes and edges have on the interpretation of obtained results. We will also discuss limitations of currently available data imputation techniques in application to social sciences and outline key directions for future research.

**May 29, 18.10–19.30**  
**Kochnovskii proezd, 3, room 205**  
**Register at <https://cs.hse.ru/en/colloquium>**

