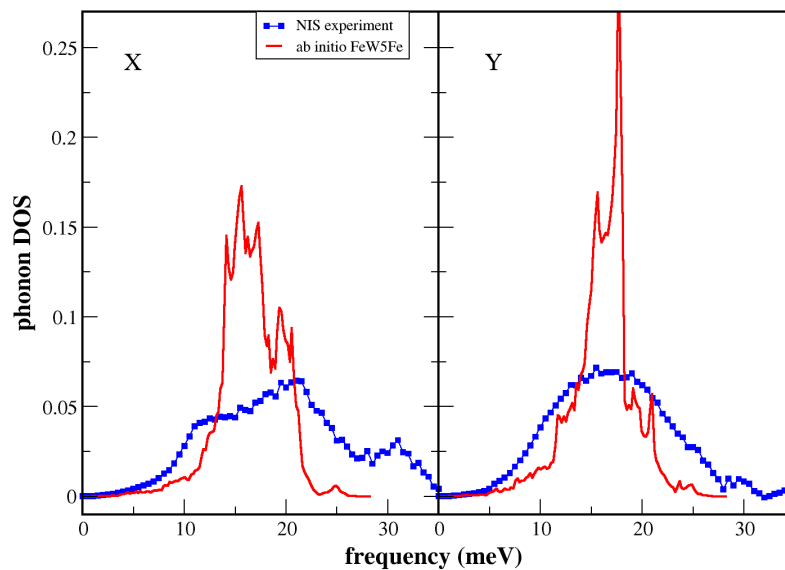


## What differs simulated (110) surface Fe-monolayer from the real one? – comparative analysis of ab initio study vs. NIS experiment

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Nowadays, the nuclear inelastic scattering (NIS) measurements as well as first-principles calculations of the (110) surface Fe-monolayer phonons are the state-of-the-art of the modern physics techniques. In both cases all accessible possibilities should be utilized to obtain credible and valuable results. Simultaneously, it will be nice to obtain at the end a very good overall agreement stressing the power of the methods used.



During presentation, author will try to answer the questions:

- (i) What features of the real sample can we simulate today?
- (ii) How to explain existing differences between experimental data and theoretical results?