## Storage of Methane by van der Waals confinement: Sumanene/Ag(111) a preliminary experimental/computational study

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Sumanene molecules ( $C_{21}H_{12}$  fragments of C60) can be adsorbed on metallic substrates forming regular networks of units, with nanometer spacing, capable to host methane molecules. I will discuss the results obtained from a combined experimental/computational study for the adsorption of sumanene on Ag(111) surfaces and co-adsorption of methane molecules.