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Electron-Phonon interaction in hexagonal layered compounds LILIA BOERI, MPI-FKF, Stuttgart, MATTEO GIANTOMASSI, UPCM, Université Catholique de Louvain, Louvain-la-Neuve, Belgium, GIOVANNI B. BACHELET, INFM SMC and Dipartimento di Fisica, Università "la Sapienza", Roma, Italy, OLE KROGH ANDERSEN, MPI-FKF, Stuttgart, Germany — The discovery of superconductivity in MgB_2 has initiated a thorough search for new electron-phonon ($e-ph$) superconductors, particulary among hexagonal layered compounds. In this talk I will describe, using *ab-initio* methods, the factors that determine the electron-phonon properties of two classes of recently discovered superconductors, namely alkali-earth intercalated graphites (highest T_c 15.1 K for CaC_6)[1] and metal-intercalated ternary compounds MaAlSi. [2]
References:
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[2] M. Giantomassi, L. Boeri, and G. B. Bachelet, Phys. Rev. B 72, 224512 (2005)

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