Code: Quantum Espresso DFT Code: Yambo Ground-state density • Kohn-Sham wavefunctions **DFPT** MBPT • RPA electronic Phonons (incl. double grid) screening GW quasiparticles Electron-phonon coupling BSE excitons (incl. double grid) Exciton-Phonon • Exciton-phonon coupling Phonon-assisted luminescence