



FIG. 2: Left panel: stereographic projection of the photoemission intensity modulation as a function of emission angle for scans taken at different photon energies $h\nu$. The colored fraction of the disk are the data, the grayscale part is a calculation of the expected intensity. Right panel: The corresponding binding energy variations obtained from the peak fitting. Note that these variations are shown as a function of the wave vector parallel to the surface rather than emission angle. The binding energy uncertainty is of the order of 10 meV. The green crosses correspond to the reciprocal lattice points of graphene, *i.e.* to the $\bar{\Gamma}$ points.