Tailoring spin-orbit Mott insulators via designed superlattices VI-
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— The layered perovskite iridates Sr$_{n+1}$Ir$_n$O$_{3n+1}$ show a transition from a magnetic
insulating to a semi-metallic state as the number of layers $n$ is increased. This be-
haviour is intimately related to the interplay between spin-orbit coupling, electronic
correlations and dimensionality. In this talk, we will show that the fabricated su-
perlattices [(SrIrO$_3$)/SrTiO$_3$], provide new insight into this behaviour. Theoretical
calculations using density functional and tight binding approaches will be presented
to support our results.