

There is a rich pattern of CP asymmetries across the phase space of charmless three-body decays of B^\pm mesons (PRD **90** (2014) 112004). The distribution of CP asymmetries is associated with the possible sources of strong phase differences arising from long-distance processes related to resonances and rescattering of the decay products. The resonances cause a variation of the strong-phase difference over the Dalitz plot. As a consequence, the CP asymmetry is positive in some regions and negative in others, reducing the sensitivity of the phase-space integrated asymmetry. Large positive CP asymmetries are observed close to large negative ones, the changing of sign occurring when crossing the resonance mass. In the region $1 < m_{hh} < 1.6$ GeV/ c^2 ($h = K$ or π), large positive CP asymmetries in one channel come along with large negative CP asymmetries in another channel with the same quantum numbers. This is a consequence of the CPT symmetry, according to which the total decay rates of particle and antiparticle are the same. A detailed description of the observed pattern of CP asymmetries requires a full amplitude analysis. Given the complexity of the structures observed in the Dalitz plots, different tools and methods are used in the amplitude analyses. The prospects for the Dalitz plot analysis of $B^\pm \rightarrow h^- h^+ h'^\pm$ decays are discussed, where $h, h' = \pi, K$. Two analysis of the decays are in final stages of internal review, namely the $B^\pm \rightarrow \pi^- \pi^+ \pi^\pm$ and $B^\pm \rightarrow K^- K^+ \pi^\pm$. Another decay, $B^\pm \rightarrow K^- K^+ K^\pm$, is also being analysed. In the last part of the talk, these tools and methods are discussed.