WHAT IS HOWE CORRESPONDENCE?

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Abstract:

Harish-Chandras monumental work was focused on his Plancherel formula for a real reductive group. A complementary approach is that of Roger Howe. He starts with the Weil representation of the metaplectic group. Unlike the left-regular representation, the Weil representation is a minimal representation, almost invisible from the view point of Harish-Chandra. Still, it is a magnificent structure, a sort of Chomolungma in Representation Theory. Howe restricts it to various subgroups, mostly reductive dual pairs, mixes in some ideas from the Classical Invariant Theory and derives far reaching consequences. We shall explain the details..