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In this talk I will present work regarding the structure of integro-differential elliptic operators which are translation invariant and those which change continuously with translations. In work with Russell Schwab, it is shown such operators admit a representation through a min-max formula involving Levy operators, the operators themselves being translation invariant or having "regular" coefficients reflecting the spatial dependence of the original operator. The relevance of such characterizations to comparison principles for viscosity solutions will be discussed, particularly with regards to recent work with Chenchen Mou and Andrzej Swiech. (Received August 20, 2018)