ABSTRACT. We obtain new general results on the structure of the space of translation invariant continuous valuations on convex sets (a version of the hard Lefschetz theorem). Using these and our previous results we obtain explicit characterization of unitarily invariant translation invariant continuous valuations. It implies new integral geometric formulas for real submanifolds in Hermitian spaces generalizing the classical kinematic formulas in Euclidean spaces due to Poincaré, Chern, Santaló, and others.