George A Anastassiou* (ganastss2@gmail.com), Department of Mathematical Sciences, University of Memphis, Memphis, TN 38152. Most General Fractional Self Adjoint Operator Representation formulae and Operator Poincaré and Sobolev type and other basic Inequalities. Preliminary report.

We give here many very general fractional self adjoint operator Poincaré and Sobolev type and other basic inner product inequalities to various directions. Initially we give several very general fractional representation formulae in the self adjoint operator sense. Inequalities are based in the self adjoint operator order over a Hilbert space. (Received September 11, 2016)