Asymptotic behaviour of solutions of integral equations with singular kernels via a new Gronwall inequality.

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We present a new Gronwall type inequality for integrals with singular kernels which we will use to study the asymptotic behaviour of global solutions of solutions of some non-linear fractional differential equations. These are studied via the corresponding fractional integral equation, which has a singular kernel. We give conditions which imply that the solution is uniformly bounded.

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