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Noboru Chikami* (noboru.chikami@sigmath.es.osaka-u.ac.jp). *Remarks on Gagliardo-Nirenberg type inequalities in Fourier-Herz spaces.*

We prove Gagliardo-Nirenberg type inequalities in Fourier-Lebesgue spaces and also in end-point Besov and Fourier-Herz spaces. A subfamily of these inequalities can be viewed as a refinement of the corresponding classical Gagliardo-Nirenberg inequalities. For instance, a refinement of the Ladyzhenskaya inequality can be deduced as a corollary. Some application to the blow-up criterion of the incompressible viscous fluid is also shown. (Received January 29, 2019)