1139-39-593 **Choonkil Park*** (baak@hanyang.ac.kr), Department of Mathematics, Hanyang University, Seoul, 04763, South Korea. *New additive functional inequalities and partial multipliers in Banach algebras.* Preliminary report.

In this talk, we solve the additive functional inequalities

$$\|f(x+y+z)-f(x+y)-f(z)\| \leq \|s(f(x-y)+f(y-z)-f(x-z))\| \tag{1}$$

and

$$\|f(x-y)+f(y-z)-f(x-z)\| \leq \|s(f(x+y-z)+f(x-y+z)-2f(x))\|, \tag{2}$$

where s is a fixed nonzero complex number with $|s|<1$.

Using the direct method, we prove the Hyers-Ulam stability of the additive functional inequalities (**??**) and (**??**) in complex Banach spaces. This is applied to investigate partial multipliers in Banach $*$-algebras, unital C^*-algebras, Lie C^*-algebras, JC^*-algebras and C^*-ternary algebras, associated with the additive functional inequalities (**??**) and (**??**). (Received February 20, 2018)