

1129-46-275

Marat V. Markin* (mmarkin@csufresno.edu), Department of Mathematics, California State University, Fresno, 5245 North Backer Avenue, M/S PB108, Fresno, CA 93740-8001. *On the Mean Ergodicity of Weak Solutions of an Abstract Evolution Equation*. Preliminary report.

Found are conditions of rather general nature sufficient for the existence of the limit at infinity of the *Cesàro means*

$$\frac{1}{t} \int_0^t y(s) ds$$

for every *bounded weak solution* $y(\cdot)$ of the abstract evolution equation

$$y'(t) = Ay(t), \quad t \geq 0,$$

with a closed linear operator A in a Banach space X . (Received March 17, 2017)