1023-47-1434 **Alfonso Montes-Rodriguez** and **Manuel Ponce-Escudero*** (mpe@us.es), Dpto. de Analisis Matematico, Universidad de Sevilla, Apdo. Correos 1160, 41080 Sevilla, Spain, and **Stanislav A. Shkarin**. *Invariant subspaces of parabolic non-automorphisms in the Hardy space.* Preliminary report.

It will be shown that the lattice of invariant subspaces of the operator of multiplication by a cyclic element of a Banach algebra consists of the closed ideals of this algebra. This result is used to find the lattice of invariant subspaces of composition operators acting on the Hardy space and whose inducing symbol is a parabolic non-automorphism self-map of the unit disk. Thus,

$$\operatorname{Lat} C_\varphi = \{\overline{\operatorname{span}}\,\{e_t \colon t \in F\} \colon F \in \mathbb{F}[0,\infty)\},$$

where $\mathbb{F}[0,\infty)$ is the set of closed subset of $[0,\infty)$. In particular, each invariant subspace always consists of the closed span of a set of eigenfunctions of the composition operator.

Joint work with Alfonso Montes-Rodriguez and Stanislav A. Shkarin.

Stanislav A. Shkarin. (Received September 26, 2006)