ANTONIA DUFFNER, Universidade de Lisboa

Preservers and converters of immanant functions

A linear map T defined on $M_n(F)$ preserves a function f if $f(T(X) = f(X)$ for all X $\in M_n(F)$. In this talk I will present some recent results on preservers of an immanant on some subsets of $M_n(C)$, where the immanant function associated with an irreducible complex character χ is the function $d_\chi : M_n(c) \longrightarrow M_n(C)$ defined by

$$d_\chi(A) = \sum_{\sigma \in S_n} \prod_{i=1}^{n} a_{i\sigma(i)}.$$