PROPUESTA DE TRABAJO DE FIN DE MÁSTER MÁSTER EN MATEMÁTICAS AVANZADAS

Directora: Eva A. Gallardo Gutiérrez

Alumno: Miguel Barea Fernández

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<u>Título:</u> Rota's universal operators and invariant subspaces in Hilbert spaces.

Resumen: A Hilbert space operator is called universal (in the sense of Rota) if every operator on the Hilbert space is similar to a multiple of the restriction of the universal operator to one of its invariant subspaces. Universal operator invites an approach to the Invariant Subspace Problem and the goal of the present work is both studying properties and exhibiting remarkable examples of such operators appeared in the last few years.