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**S. Argyros, D. Freeman\*** (freeman@math.utexas.edu), **R. Haydon, E. Odell, Th. Raikoftsalis, Th. Schlumprecht** and **D. Zisimopoulou**. *Embedding Banach spaces into spaces with very few operators*. Preliminary report.

The "scalar plus compact problem" asks if there exists a Banach space with the property that every bounded operator on the space is equal to a scalar times the identity plus a compact operator. This long outstanding problem was recently solved by S. Argyros and R. Haydon who constructed such a space  $Z$  with the additional property that  $Z^*$  is isomorphic to  $\ell_1$ . It was then shown by D. Freeman, E. Odell, and Th. Schlumprecht that every Banach space,  $X$ , such that  $X^*$  is separable embeds into a Banach space  $Y$  such that  $Y^*$  is isomorphic to  $\ell_1$ . We combine both of these constructions to prove that if  $X$  is a Banach space such that  $X^*$  is separable and  $\ell_1$  does not embed into  $X^*$ , then  $X$  embeds into a Banach space  $Z$  such that every bounded operator on  $Z$  is equal to a scalar times the identity plus a compact operator. (Received September 22, 2010)