## $p^r$ -Selmer companion modular forms

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## **Abstract**

Given two elliptic curves  $E_1$  and  $E_2$  over a number field K, Mazur and Rubin have defined them to be n-Selmer companion if for every quadratic twist  $\chi$  of K, the n-Selmer group of  $E_1^\chi$  and  $E_2^\chi$  over K are isomorphic. We will discuss an analogue of this for modular forms.