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## Search for the phi(2170) in the photoproduction reaction

We have studied the  $\gamma p \rightarrow \eta \varphi p$  reaction within the effective Lagrangian approach by considering the contribution of the intermediate state  $\varphi(2170)$  production, and the background contributions of t-channel  $\pi 0$  and  $\eta$  mesons exchanges with the intermediate states N and N(1535). Our calculations show that there may be a peak, at least a bump structure around 2180 MeV associated to the resonance  $\varphi(2170)$  in the  $\eta \varphi$  mass distribution. We suggest to search for the resonance  $\varphi(2170)$  in this reaction, which would be helpful to shed light on its nature.

Primary author: Dr WANG, En (Zhengzhou University)

**Presenter:** Dr WANG, En (Zhengzhou University)

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