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Abstract for an Invited Paper for the SES19 Meeting of the American Physical Society

## PrimEx results for the Neutral Pion Radiative Width.<sup>1</sup>

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The  $\pi^0 \to \gamma \gamma$  decay amplitude is one of the most precisely calculable values in the low energy QCD. The PrimEx-I and PrimEx-II experiments used Primakoff effect to measure  $\pi^0$  radiative decay width. I will present the combined result of both PrimEx experiments performed in Hall-B at Jefferson Lab. The PrimEx-I experiment performed in 2004 achieved a precision of 2.8%. PrimEx-II has been conducted in 2010 with a collection of five times more statistics and achieved 1.6% precision. This measurement gives a possibility to check QCD predictions at 1.5% level.

<sup>1</sup>NSF MRI PHY 0079840, RFBR 18-02-00938