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 $\Sigma^+ \to p\mu^+\mu^-$ in the Standard Model GERMAN VALENCIA, Iowa State University — The HyperCP collaboration has recently reported the observation of three events for the mode $\Sigma^+ \to p\mu^+\mu^-$. They have suggested that new physics may be required to understand the implied decay rate and the observed $M_{\mu\mu}$ distribution. Motivated by this result, we re-examine this mode within the Standard Model. The result is long distance dominated and we estimate it with the aid of chiral perturbation theory.

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