

# **XXXII International (ONLINE) Workshop on High Energy Physics "Hot problems of Strong Interactions"**

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## **Neutral meson properties in hot and magnetized quark matter**

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We discuss the properties of neutral mesons using effective models of QCD: Nambu-Jona-Lasinio (NJL) model and Linear Sigma model with quarks (Lsmq). We show that when accounting for the effects of the magnetic field on the model couplings, the neutral pion mass decreases monotonically as a function of the field strength. We find an excellent agreement with recent lattice QCD calculations, reproducing the monotonically decreasing trend with the field strength.

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**Session Classification :** Session 2: QCD phase diagram under strong external magnetic field (NOTE! late starting time)

**Track Classification :** QCD phase diagram under strong external magnetic field