

*Speaker:* **Morimoto, Kanji**  
*Title:* *On Hoidn's inequality*  
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*Abstract:* Let  $K$  be a knot in the 3-sphere  $S^3$  and  $g_1(K)$  the 1-bridge genus of  $K$ . Concerning the additivity of the 1-bridge genus under connected sum, P. Hoidn showed that  $g_1(K_1\#K_2) \geq g_1(K_1) + g_1(K_2)$  if both  $K_1$  and  $K_2$  are small. In this talk we generalize the result. In fact we show that  $g_1(K_1\#K_2) \geq g_1(K_1) + g_1(K_2)$  if both  $K_1$  and  $K_2$  are meridionally small. In addition, we discuss the best possibility on the inequality.