

博士論文公聴会の公示（物理学専攻）

学位申請者： Tran Hai Nam

論文題目： η PHOTO-PRODUCTION FROM PROTON TARGET AT
LEPS2/BGOEGG EXPERIMENT

(LEPS2 BGOegg 実験による陽子標的からの η 中間子の光生成)

日時： 2019年2月7日（木） 13:00 - 14:30

場所： 理学研究科 H 棟 7 階セミナー室（H701 号室）

主査： 中野貴志

副査： 川畑貴裕、與曾井勝、保坂淳、青井考

論文要旨：

Study of baryon resonances provides a key to deepen and test our understanding of QCD in the non-perturbative regime. One of the big problems in this area is the so-called “missing resonance” problem; the number of experimentally confirmed resonances is much less than that of resonances predicted by the constituent quark model. To shed light on the problem, exclusive measurements of photo-production of an eta meson from a proton target with an egg-shape BGO calorimeter (BGOegg) and forward charged particle detectors were carried out. The high precision data of the differential cross-section at backward angles were obtained and they were compared with the prediction from etaMAID2018. The comparison shows possible evidence for a new N^* resonance with a mass of 2.2~2.3 GeV.