東北大学大学院情報科学研究科
純粋・応用数学研究センター

情報数理談話会のお知らせ

日　時： 2026年2月20日㈭ 15:00 より 16:00 まで
場　所： 東北大学大学院情報科学研究科棟 2階大講義室

講演者： 瀬野　裕美 氏 （東北大学情報科学研究科）
題　目： オンラインゲーム依存に関する個体群動態モデル（A population dynamics model for online gaming disorder）

[概 要] WHO (2018) acknowledged addiction to internet gaming as a genuine disorder, named Internet Gaming Disorder (IGD), defined as "Persistent and compulsive use of the internet to engage in games, often with other players, leading to clinically significant impairment or distress." Developing online platforms foster characteristic online social relationships, even in games like MMORPG (massively multiplayer online role playing game). These relationships can intensify the tendency to compulsively engage in gaming. Therefore, the prevalence of online gaming disorders becomes more closely linked to the population dynamics of gamers. The inherent social reinforcement provided by online games makes it challenging for addicted gamers to regain control and revert to moderate gaming. We employ a mathematical model of the population dynamics about online gaming, using ordinary differential equations. Our model results emphasize the critical importance of earlier intervention to identify and address online gaming disorders, potentially leading to medical/therapeutic treatment. Without such well-systemized intervention, the number of addictive gamers could escalate beyond the socially manageable level.

ホームページ：https://www.math.is.tohoku.ac.jp/research/colloquium.html