<div align="center">

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

</div>

日　時： 2020 年 7 月 13 日㈭ 13:30 より 14:30 まで

場　所： Google Meet によりオンラインで開催
　　　　※参加方法はホームページをご覧下さい

講演者： Emmanuel J. Dansu 氏　(東北大学大学院情報科学研究科)

題　目： Population dynamics modeling for the effect of collective behavior on information spread

備　考： この情報数理談話会は課程博士予備審査会を兼ねています

[概 要]　Based on the ideas of disease spread dynamics, the thesis examines the diffusion of information subject to certain psychological and sociological situations. We consider two major models, namely *a rejoinder model* in which there are two interacting pieces of information spreading with a time lag between them and *a threshold model* in which a person only begins to spread a piece of information after an acceptable number of people have been spreading it. The analysis of the rejoinder model shows that there is a critical time frame within which an individual, organization or government should release information to properly correct misleading information that has been spreading in a population for some time. In addition, the model shows that a critical portion of a population should be targeted with corrective information for it to be effective. From the threshold model, we discovered that the final proportion of knowers of an information is uniquely determined by the initial proportion of knowers in the population. There are also critical proportions and threshold values which determine how well an information spreads within a population. The models provide theoretical frameworks for the promotion of information literacy in order to combat misinformation and disinformation. Information warfare has become intense due to increasing social activities on the internet.

<div align="center">

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

</div>