# ANALYSIS OF COVID-19 MISINFORMATION: ORIGIN AND CURE NARRATIVES

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Research Questions:

- Can we quantify the *spread* of misinformation?
- Can we quantitatively characterize the *users* who spread misinformation?
- Can we study the *differences* in the spread of different narratives?
- Can we observe *correlation* between the narratives and the people who spread the narratives?

Data Analysis & Results:

Silver

Hydroxy
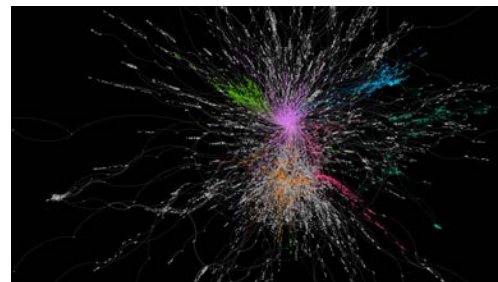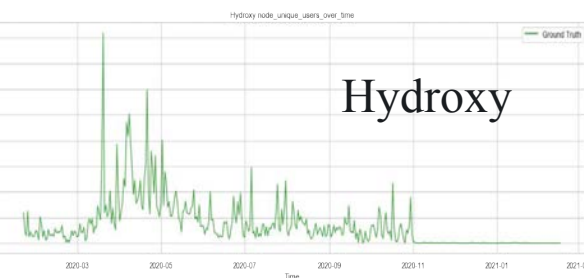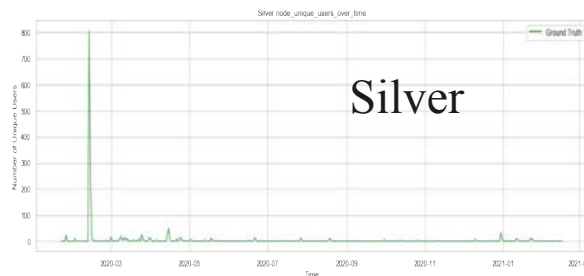
Methodology/Project Design:

- *Data*: Social media posts and comments from 02/20 to 02/21
- *Dynamics Over time*: Use different metrics such as shares, audience or unique users, lifetime, speed, Gini coefficient and Palma ratio for quantification of virality
- *Social structure of users*: Use different metrics such as clustering coefficient, centralities, community structure, degree distribution to quantify the few key/important users among a vast number of users

Interpretation & Conclusions:

- Quantifying *dynamics over time* provides deep insights on virality of narratives; corroborated with authentic news
- *Graph analytics* provided insights on social structure of people interacting on a given narrative (few users are more important than most users)
- *Recommendations for combating misinformation*: Use cut-off strategies such as limiting the number of shares for a post and comments on a post to contain the spread and virality. Use speed breaking techniques such as delays and fact checks, and promote positive and accurate messages go viral