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NASA Goddard SPRING 2020 Colloquium Series

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**Nate Roquet**  
CATALOG

***Data Storage in DNA***

**Wednesday, February 26, 2020**  
**Building 3 Auditorium – 11:00 AM**  
(Light refreshments at 10:30 AM)



CATALOG is developing the world’s first commercial system for data storage in DNA. DNA is extremely information dense and stable, yet parallel and readily operable. It begets a “cold computer” that merges the features of archive, query, and portability. In this talk, we will learn methods of storage data in DNA and we will explore the scalability of these methods. We will also look at how physical-level operations on DNA can be mapped to efficient implementations of data-level operations, such as replication, access, and logic. Technology will be presented at a high-level that abstract away a lot of the chemistry.

Nate Roquet co-founded CATALOG in September 2016. He leads the innovation team as they work towards developing and commercializing technologies for storing and computing data with DNA. Prior to CATALOG, Nate received his bachelor’s degree in Physics from Princeton and his PhD in Biophysics from Harvard. He did his dissertation in synthetic biology group where he invented a molecular system, known as biological state machines, for recording and computing chemical events in living cells. Nate’s ultimate goal is to bring programming to biology, AND biology to programming. Beyond career work, Nate enjoys reading sci-fi, especially any book where something comes from or goes to outer space.

IS&T Colloquium Committee Host: Robert Harberts, Code 423

Sign language interpreter upon request: 301-286-7348

Request future announcements: [ist-colloq-subscribe@lists.nasa.gov](mailto:ist-colloq-subscribe@lists.nasa.gov)