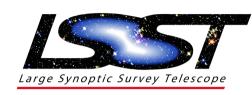


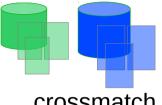
## Kafka/Avro alerts







Community broker



crossmatch characterization annotation

Filtering

High data rate (> 10<sup>3</sup> Hz)

**VOEvent Transport Protocol (VTP)** 

Rabbit MQ

Apache Kafka

**VOEvent** 

Broadcast as VOEvent

Low data rate (< 10 Hz)

Existing VOEvent infrastructure and community

D.Morris Institute for Astronomy, Edinburgh University May 2018

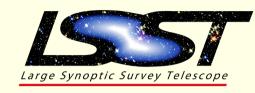






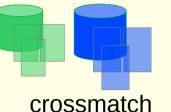
## Kafka/Avro alerts







Community broker



crossmatch characterization annotation

Filtering

High data rate (> 10<sup>3</sup> Hz)

New experiments - 2020+

**VOEvent 3.x?** 

## **VOEvent 2.x standard**

**VOEvent Transport Protocol (VTP)** 

Rabbit MQ

Apache Kafka

**VOEvent** 

Broadcast as VOEvent Low data rate (< 10 Hz)

Existing VOEvent infrastructure and community

D.Morris Institute for Astronomy, Edinburgh University May 2018

IVOA Interop 2018/05/29