

Outline: resource-bounded query evaluation

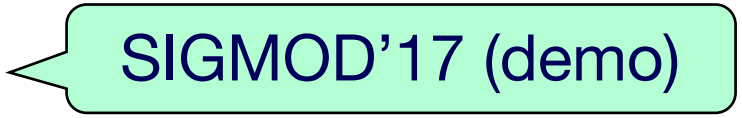


- ▶ **Theory**: bounded evaluation
- ▶ **Framework**: bounded approximation
- ▶ **System**: BEAS

PODS'15-16, SIGMOD'16, VLDB'14, TODS



VLDB'17



SIGMOD'17 (demo)

- Y. Cao, W. Fan: Data Driven Approximation with Bounded Resources, VLDB 2017
- Y. Cao, W. Fan, Y. Wang, T. Yuan, Y. Chen: BEAS: Bounded Evaluation of SQL Queries, SIGMOD 2017 (demo)
- Y. Cao, W. Fan, F. Geerts, P. Lu, Bounded query rewriting using views. PODS 2016 & TODS.
- Y. Cao and W. Fan, An effective syntax for bounded relational queries, SIGMOD 2016
- W. Fan, F. Geerts, Y. Cao, T. Deng, P. Lu: Querying Big Data by Accessing Small Data, PODS 2015
- Y. Cao, W. Fan, W. Yu: Bounded Conjunctive Queries, VLDB 2014

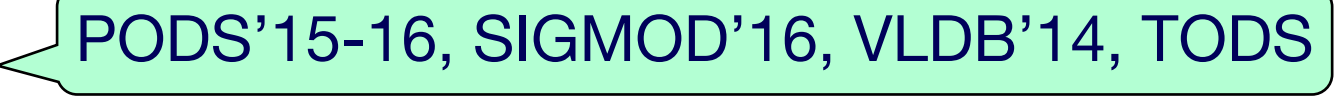

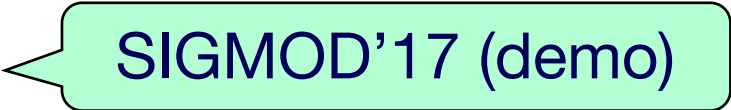
I. Bounded Query Processing on DBMS

II. Bounded Query Processing on Key-value Stores

► a data model for bounded evaluation on key-value stores

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Bounded Evaluation

- A new paradigm for query processing