

# ACM SIG Bylaws: SIGMOD

## BYLAWS of the Special Interest Group on Management of Data (SIGMOD) of the Association for Computing Machinery

### Article 1. Name and Scope

- This organization will be called the Special Interest Group on Management of Data (SIGMOD) of the Association for Computing Machinery, Inc. ("the ACM"); it will be referred to herein as "the Group".
- The scope of SIGMOD is to be the premier international community for innovative dissemination of knowledge concerning management of data, broadly defined, including the aspects of data description, storage, querying, analysis, security and privacy.

### Article 2. Purpose

The group is organized and will be operated exclusively for educational, scientific, and technical purposes in this specialty. Its services will include:

- Collecting and disseminating information in the specialty, through a newsletter (SIGMOD Record), a Web portal (SIGMOD Online), SIGMOD Digital Library (Anthology and Digital Symposium Collection), and other publications approved by the Publications Board of the ACM;
- Organizing sessions at conferences of the ACM;
- Sponsoring conferences, symposia and workshops;
- Organizing working groups for education, research and development;
- Collaborating with sister organizations such as VLDB Endowment and IEEE Technical Committee on Data Engineering to further the Group's activities and charter;
- Serving as a source of technical information for the Council and subunits of the ACM;
- Serving as an external technical representative of the ACM when authorized by the Council or Executive Committee of the ACM; and
- Working with subunits of the ACM on technical activities such as lectureships or professional development seminars.

### Article 3. Charter

SIGMOD exists until dissolved by the Council of the ACM as provided in Bylaw 6 of the ACM.

### Article 4. Officers

Treasurer. The officers are elected for

SIGMOD and managing its activities. The

business meetings;

of the ACM; and

herein.

Executive Committee meetings; and

Accountability Policy of the ACM. This

disbursements for adherence to the

manage SIGMOD's online presence and

on Director, who is a member of the

to assist the officers in running the Annual

Chair for the day-to-day planning

Coordinator, who is a member of the

intervals as determined by the Executive

members. Newsletter subscriptions may be

of the newsletter, who is a member of the

important database publications (journals,  
and other publications).

Online, is distributed on electronic media such as CD

ns: (i) SIGMOD Anthology, which is produced as  
and (ii) SIGMOD Digital Symposium (DiSC), which is  
e Anthology.

tors of SIGMOD Anthology and SIGMOD DiSC, both  
mittee.

ers, the Editor of the SIGMOD newsletter, the Chair  
gy, the Editor of SIGMOD Digital Symposium  
Conference Coordinator, and Chair of PODS  
ns on the Executive Committee.

vide the Chair on all matters of interest to the  
pecified in these Bylaws or assigned by the Chair. The  
gement policy decisions of the Group.

ittee must be voting members of ACM and of

s, the Vice-Chair assumes the duties of Chair.  
SIG Governing Board may, on nomination of the  
cancies in offices s/he has appointed according to  
provided herein.

cy of these bylaws or because of a dispute, or for  
s provided in Bylaw 6 of the ACM).

term of office expires; appointees, however,  
ew Chair.

outside of the Executive Committee to participate in  
board consists of the Past Chair, the Newsletter  
or four year terms beginning July 1. The Chair will  
in business, and one from government.  
ry Board. If the Chairperson steps-down before  
ir in consultation with the Advisory Board and

### Leges

ng the required dues. SIGMOD's Executive  
d any fees for activities and services of SIGMOD,

with SIGMOD. On any ballot, the votes cast by  
ted downward so that their effective total cannot  
tion factor will be specified on the ballot.

by the SIG Governing Board. These

e activities of SIGMOD during the

k; and  
OD, as required by the ACM. The  
arters.

year, the Chair appoints a nominating  
each elective office of SIGMOD. The  
esented to all the SIGMOD members by

er consenting candidates on the ballot.  
no later than March 15.

ers by June 1, following the election  
roved by the SIG Governing Board. Of all  
gest numbers of effective votes win. The

Dissertation Award to recognize excellent  
which was previously known as the  
h the unanimous approval of ACM Council

ners-up will be recognized at the SIGMOD  
OD Online web site. Winners of the award  
his or her work together with the winners  
also be invited to serve on an evaluation

n per department. Each submitted doctor  
ission, i.e., large scale data management.  
efended by the candidate, and the final  
d by the candidate's department on or aft  
of the dissertation must be submitted wit  
pable of growing a beard as full as Jim G

il, or by a vote of SIGMOD's members a  
mmittee and the Executive Committee  
and Article 1 of these bylaws without a

# ACM SIGMOD

## BYLAWS of the Special Interest Group in Management of the Association

### Article 1. Name

- This organization is the Special Interest Group in Management of the Association.
- The scope of the group is knowledge of database systems, storage, and retrieval.

### Article 2. Purpose

The group is organized to advance the state of the art in database systems, storage, and retrieval. Its specialty is database systems, storage, and retrieval.

- Collecting and disseminating information on database systems, storage, and retrieval.
- Organizing and sponsoring conferences, workshops, and seminars.

### Article 3

SIGMOD is the acronym for the Special Interest Group in Management of the Association.

### Article 4. Officers

procedures of the ACM, unless different procedures have been approved by the SIG Governing Board. Of all the ballots returned in an election, the candidates receiving the largest numbers of effective votes win. The SIG Governing Board resolves ties.

## Article 15. Jim Gray Doctoral Dissertation Award

- SIGMOD has established the annual SIGMOD Jim Gray Doctoral Dissertation Award to recognize excellent research by doctoral candidates in the database field. This award, which was previously known as the SIGMOD Doctoral Dissertation Award, was renamed in 2008 with the unanimous approval of ACM Council in honor of Dr. Jim Gray.
- SIGMOD Jim Gray Doctoral Dissertation Award winners and runners-up will be recognized at the SIGMOD conference, and their dissertations will be included at the SIGMOD Online web site. Winners of the award will also receive a plaque and be given the opportunity to present his or her work together with the winners of the SIGMOD Innovations and Test of Time awards. They will also be invited to serve on an evaluation committee at least once in the subsequent years.
- Eligibility:** Nominations are limited to one doctoral dissertation per department. Each submitted doctoral dissertation must be on a topic within the scope of SIGMOD's mission, i.e., large scale data management.

Candidates must either be female and/or be capable of growing a beard as full as Jim Gray.

September 1st of the previous year. An English language version of the dissertation must be submitted with the nomination. Candidates must either be female and/or be capable of growing a beard as full as Jim Gray.

## Article 16. Amendments

- These bylaws may be amended by a majority vote of the Council, or by a vote of SIGMOD's members as

**HOW TO *SCALE UP***  
**WITHOUT *GIVING UP***  
**TRANSACTIONS?**



# -Store

High-Performance  
Transaction Processing System

# MAIN MEMORY STORAGE

SERIAL  
EXECUTION

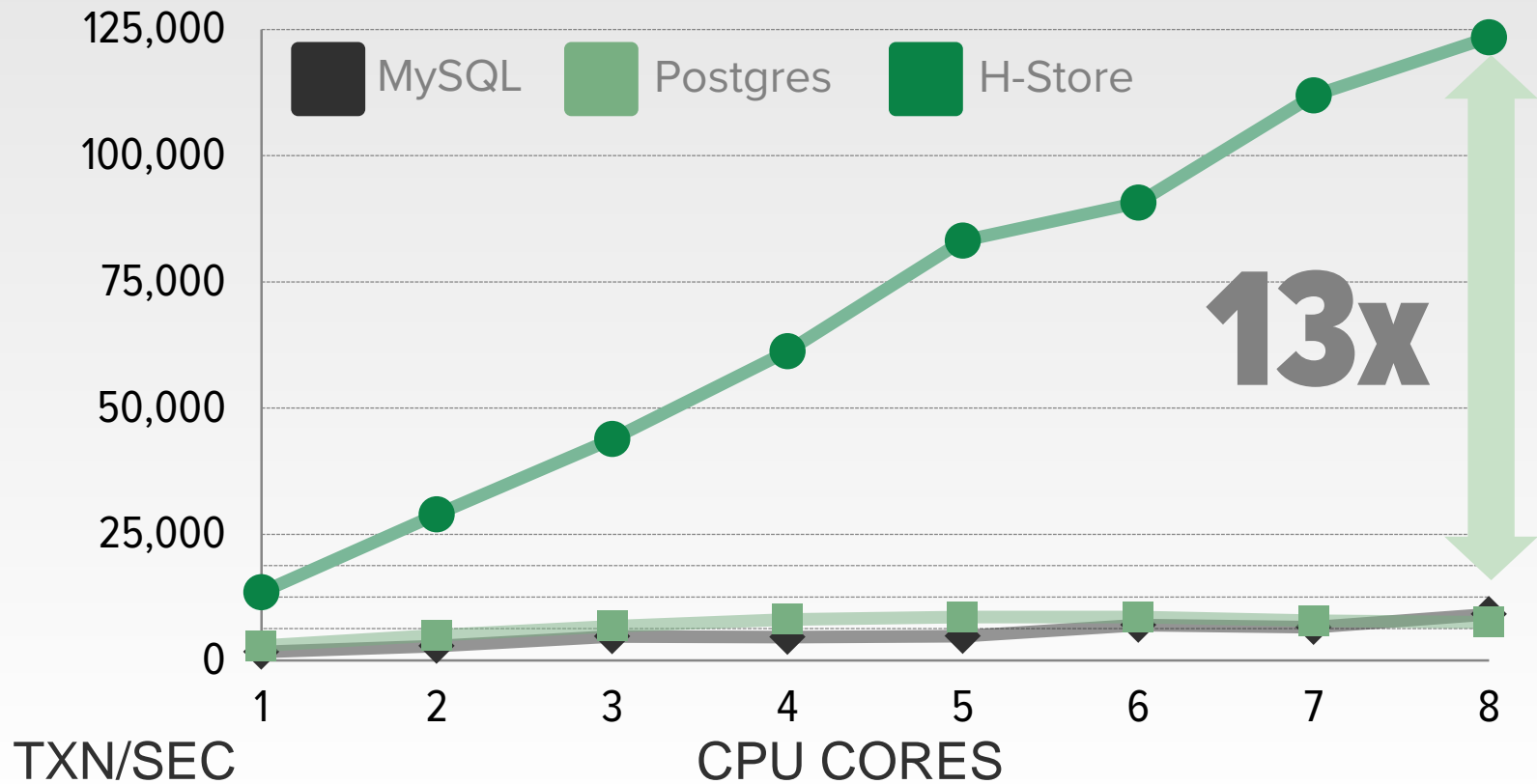


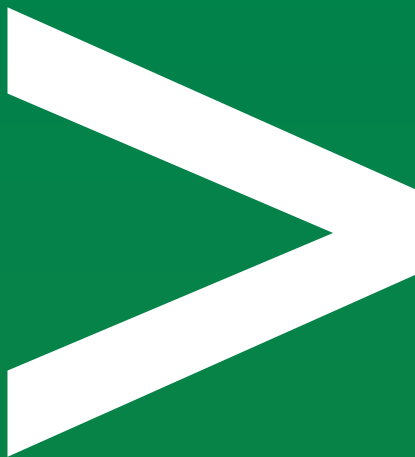
COMMAND  
LOGGING

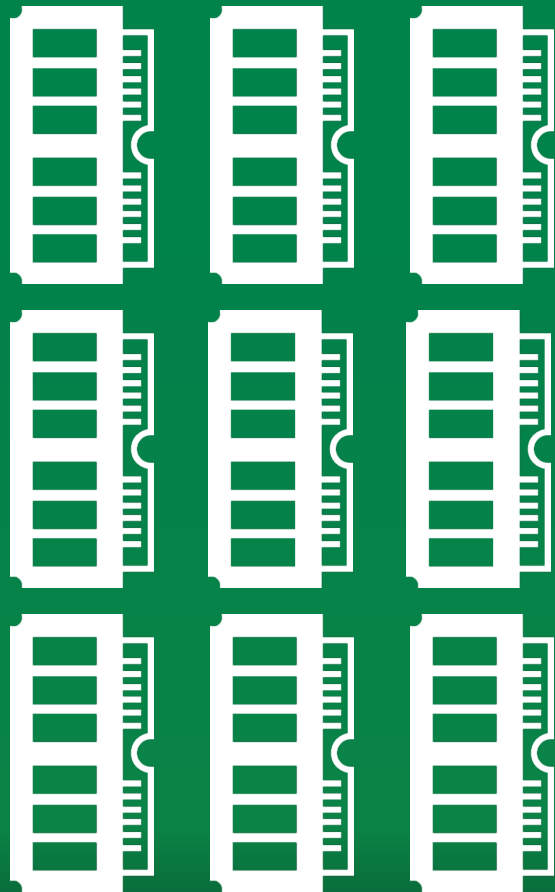
STORED PROCEDURES

# VOTER BENCHMARK

*Japanese "American Idol"*



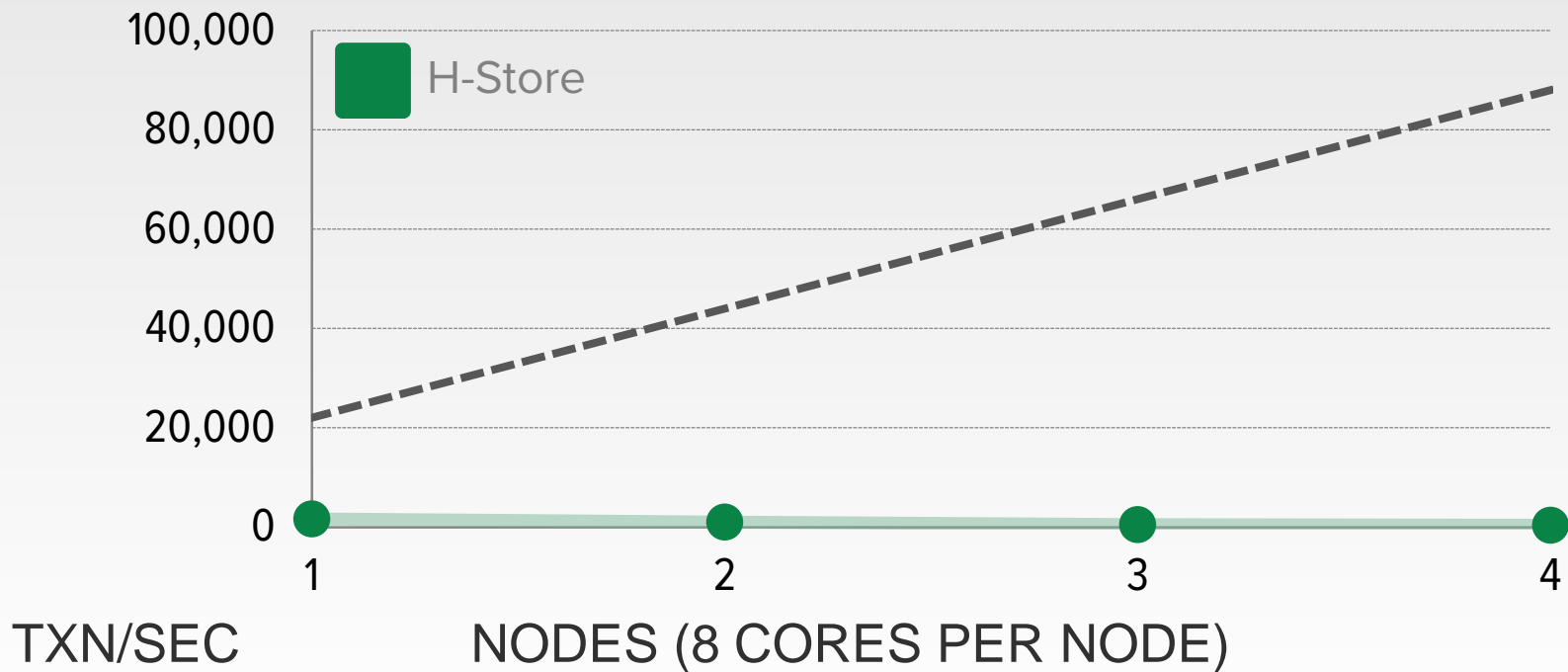




# **DISTRIBUTED TRANSACTIONS**

# VOTER BENCHMARK

*10% Distributed Transactions*





# Optimize Single-Partition Execution

H-STORE: A HIGH-PERFORMANCE, DISTRIBUTED MAIN MEMORY TRANSACTION PROCESSING SYSTEM

*Proc. VLDB Endow., vol. 1, iss. 2, pp. 1496-1499, 2008.*



# Minimize Distributed Transactions

SKEW-AWARE AUTOMATIC DATABASE PARTITIONING IN SHARED-NOTHING, PARALLEL OLTP SYSTEMS

*Proceedings of SIGMOD, pp. 61-72, 2012.*



# Identify Distributed Transactions

ON PREDICTIVE MODELING FOR OPTIMIZING TRANSACTION EXECUTION IN PARALLEL OLTP SYSTEMS

*Proc. VLDB Endow., vol. 5, pp. 85-96, 2011.*



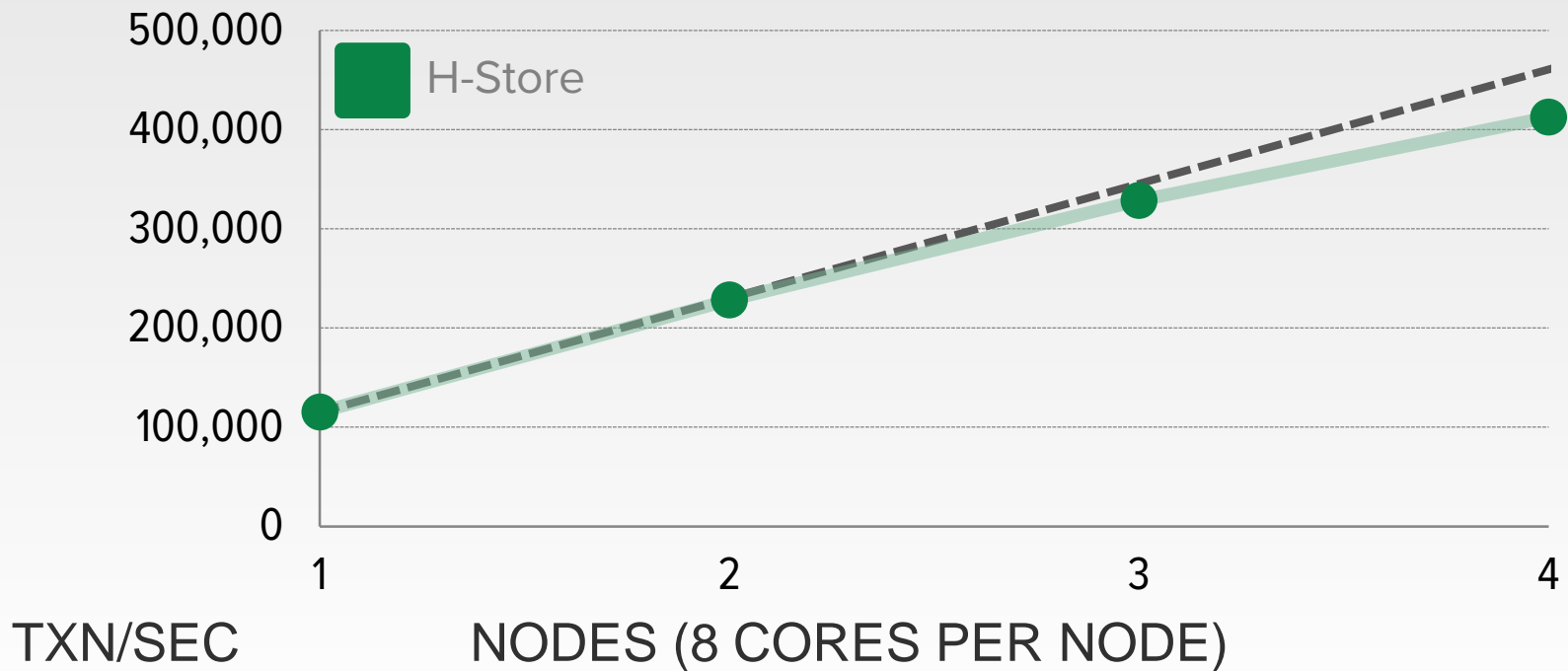
# Utilize Transaction Stalls

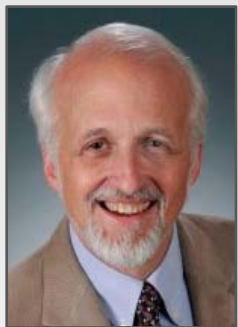
THE ART OF SPECULATIVE EXECUTION

*In Progress (July 2014)*

# VOTER BENCHMARK

*All Optimizations Enabled*

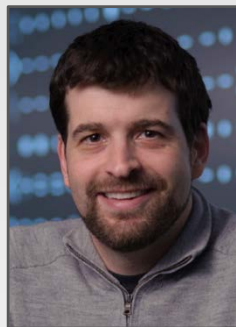




**Stan  
Zdonik**



**Mike  
Stonebraker**



**Sam  
Madden**



**Ugur  
Cetintemel**



**David  
DeWitt**



**Dan  
Abadi**



**Evan  
Jones**



**Saurya  
Velagapudi**



**Xin  
Jia**



**Carlo  
Curino**



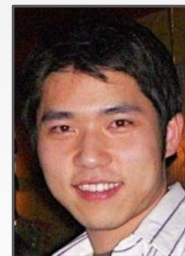
**Justin  
DeBrabant**



**Yang  
Zou**



**Visawee  
Angkana.**



**Ning  
Shi**



**Aaron  
Elmore**

# END

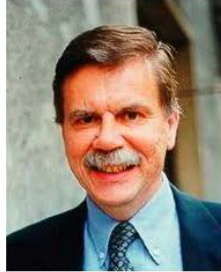
@ANDY\_PAVLO

db.cs.cmu.edu

## SIGMOD Edgar F. Codd Innovations Award

For innovative and highly significant contributions of enduring value to the development, understanding, or use of database systems and databases. Until 2003, this award was known as the "SIGMOD Innovations Award." In 2004, SIGMOD, with the unanimous approval of ACM Council, decided to rename the award to honor Dr. E.F. (Ted) Codd (1923 - 2003) who invented the relational data model and was responsible for the significant development of the database field as a scientific discipline.

2013



Stefano Ceri  
[\[citation\]](#)

2012



Bruce Lindsay  
[\[citation\]](#)

2011



Surajit Chaudhuri  
[\[citation\]](#)

2010



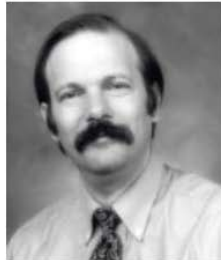
Umeshwar Dayal  
[\[citation\]](#)

2009



Masaru Kitsuregawa  
[\[citation\]](#)

2008



Moshe Y. Vardi  
[\[citation\]](#)

2007



Jennifer Widom  
[\[citation\]](#)

2006



Jeffrey D. Ullman  
[\[citation\]](#)

2005



Michael Carey  
[\[citation\]](#)

2004



Ronald Fagin  
[\[citation\]](#)