

# Parallel Database Systems in the 1990's

## — Panel Session —

*Michael J. Carey*  
IBM Almaden Research Center  
650 Harry Road, K55/801  
San Jose, CA 95120

### 1 Focus of Panel

CPUs are becoming faster and faster, with no short-term end in sight. As a result, we seem to be reaching a point where only a few relatively inexpensive CPUs are needed to keep a herd of disk drives busy. As has always been the case, disk speeds are improving at a slower pace, although RAID technology may help in this regard. The panel will explore what the implications of these trends are for the high-performance commercial database systems of the 1990's. Relevant questions include:

- Is shared-everything (SMP) parallelism all that we need now, meaning that shared-nothing parallelism was simply a dead end?
- Or, is shared-nothing still an important software architecture for truly large database problems?
- What of shared-disk systems and their variants; where do they fit in today (and tomorrow)?
- Given continued progress, will we need to worry about anything other than I/O parallelism in a few more years?
- How do emerging and potentially more challenging database applications, involving data types such as textual, image, video, and spatial data, impact the answers to these questions?

The intent of this panel is to address these and other related questions. The goal will be to identify important directions and issues for parallel database research and development efforts in the latter half of the 1990's.

### 2 List of Panelists

The panel will consist of leading parallel database system researchers and developers. It will include former/current advocates of each of the major parallel database system software architectures. Specifically, the panelists will be:

Roger Bamford, *Oracle Corporation*  
David DeWitt, *University of Wisconsin-Madison*  
Gary Kelley, *Informix Software*  
Bruce Lindsay, *IBM Almaden Research Center*  
Jim Lyon, *Tandem Computers*  
Peter Spiro, *Digital Equipment Corporation*

### 3 An Added Attraction

Before the panel itself gets underway, the session will begin with the informal presentation of the "SIGMOD Sort Performance Awards" (sponsored by Jim Gray) to this year's winners. The awards will be presented by David DeWitt, a previous award-holder.