



**TAU 2013**

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Ridge Tahoe Resort (Lake Tahoe)

Stateline, Nevada, USA

### ***TAU Keynote***

## ***Unsolved Problems in Static Timing Analysis: A Challenge***

Tom Spyrou (Design Technology Architect, Altera)

1:30 – 2:20 pm, Thursday, March 28, 2013

#### **Abstract**

At a basic level Static Timing Analysis is a solved problem. There are multiple commercial tools in varying degrees of usage at the gate and transistor level. Static Timing Analysis has also been a key algorithm in various steps of the design flow. However there are still critical and interesting problems in STA that need to be solved to effectively and efficiently design the increasingly large chips which are being manufactured in ever decreasing feature sizes. Solving problems such as accurate modeling for hierarchical blocks from both timing model and timing constraint perspective, efficient pseudo path based analysis and advanced ideas in parallel processing will be proposed. This talk will focus in on these problems, discuss the tangible benefits to solving them, and challenge the participants to move STA as discussed to the next level.

#### **Speaker Biography**

Tom Spyrou has worked for over 25 years as an EDA Technologist and has gained extensive experience in areas including Static Timing Analysis, Logic Synthesis, Power Grid Analysis, Database Technology and Floor-planning. He has led the development of leading edge commercial engines and products such as PrimeTime, Voltage Storm, First Encounter, and the Open Access Database. Tom has been driving EDA algorithms to utilize parallel programming approaches with both multi-process and multi-threaded techniques. He has a BS from Carnegie Mellon University in ECE and an MS from Santa Clara University.