



TECHNICAL MEETING

The Room Acoustic Design of the Guangzhou Opera House

by Peter Exton, Marshall Day Acoustics, Melbourne, Australia

The Guangzhou Opera House designed by Zaha Hadid Architects opened formally in February 2011. The development of the design from the competition for the Cardiff Bay Opera House in 1994 to the finished structure demonstrates a major shift in the Architects' design language. The design of the interior of the performance hall was completed with input from Marshall Day Acoustics. The presentation follows the design process for the Opera House interior from the discussions of the initial design concepts and the development of design parameters for the room, to the creation and modelling of the principal reflection surfaces. The process of modelling in Odeon and with a physical 1:10 scale model is described. Inclusion of diffraction surfaces sympathetic to the design of the venue was achieved. Measured parameters from the commissioning tests are presented.

Peter Exton is a Senior Consultant at Marshall Day Acoustics where he specialises in the room acoustic design of venues for the performing arts. Following research into room acoustic measurement techniques and 3D modelling Peter has contributed to the design of numerous projects including: 1200 seat studio for Beijing Television, 1200 seat Concert Hall in Xian, 1800 seat Opera House in Guangzhou, New Performing Arts Venue theatre in Perth, Albany Performing Arts Centre, Renovations of Perth Concert Hall, Queensland Performing Arts Centre, and the redevelopment of Hamer Hall in Melbourne.

The technical meeting will commence at 6:00pm.

After the technical presentation you are encouraged to join us for friendly dinner/drinks at Caffe Brunelli - 187 Rundle St.

DATE: Wednesday 1 June 2011

TIME: **6:00pm Technical Meeting**, S111, 1st Floor Engineering South Building, University of Adelaide (See attached map)
7:30pm Dinner, Caffe Brunelli, 187 Rundle Street

Please RSVP to Carl Howard via email at: carl dot howard AT adelaide dot edu dot au or telephone and leave a message on 8303 5460 to help us plan the event.

