

2012/2013
**Seminar
Series**

[www.cs.unb.ca/
seminarseries](http://www.cs.unb.ca/seminarseries)

**Distributed Rendering for Interactive
Multi-Screen Visualization Environ-
ments based on XNA Game Studio**

By:

**Evangelos Zotos, Bonn-Rhein-Sieg
University of Applied Sciences**

In interactive multi-screen visualization environments, every output device has to be constantly supplied with video information. Such visualization environments often use large projection screens, which require high resolution visualization data. An efficient approach to master this challenge is to distribute the workload to multiple low-cost computer systems. Nowadays' game consoles are very powerful and specialized for interactive graphics applications; therefore they are well suited to be applied for computational expensive rendering purposes in real-time applications. The proposed solution (dXNA) has been developed on Microsoft's XNA Game Studio. It supports interactive distributed rendering on multiple Xbox 360 and PC setups. Application logic synchronization and network session management are completely handled by dXNA. The interface of dXNA is similar to XNA Game Studio's interface, which allows for efficient porting of existing projects. It has been proven that dXNA is an efficient and lightweight solution for distributed rendering for interactive multi-screen visualization environments.

**Monday, April 15 @ 3:30pm
Information Technology Centre ITC317**