

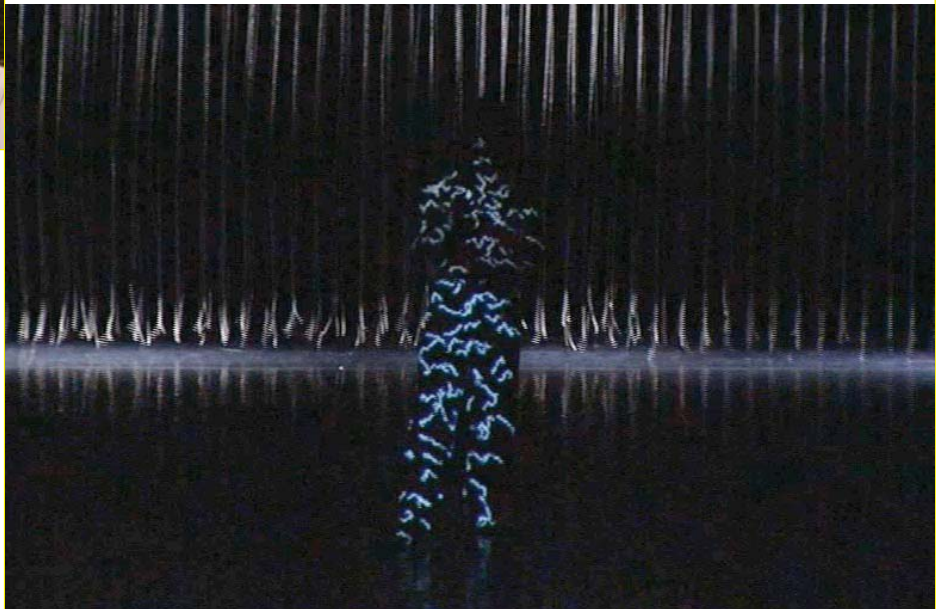
**Daniel Bisig and
Tatsuo Unemi**

**Paper: Swarms on Stage - Swarm Simulations for Dance
Performance**



Abstract:

Simulations of swarm behavior have been employed as a generative processes in many musical and artistic realizations. Despite this popularity, the application of swarm simulations as a visual and interactive component for stage performances seems to be very rare. This paper tries to show that swarm simulations can be employed as flexible and fascinating choreographic elements for dance performance. In particular, a swarm's strong spatial presence and it's behavioral flexibility provide a wide range of choreographic possibilities that accentuate or complement the human dancers' activities. This paper places a particular focus on the presentation of several examples of swarm based stage effects that have been realized as collaboration between the authors and choreographers.



Topic: Swarm & Dance

Authors:

Daniel Bisig

Zurich University of the
Arts, Institute of
Computer Music and
Sound Technology
Switzerland
www.icst.net

Tatsuo Unemi

Soka University,
Department of
Information Systems
Science
Japan
[www.intlab.soka.ac.jp/
~unemi/](http://www.intlab.soka.ac.jp/~unemi/)

*Choreography "Gods and Dogs" by Jiří Kylián, Lucent
Danstheater, The Hague, Netherlands*

Contact:

daniel.bisig@zhdk.ch
unemi@t.soka.ac.jp

Keywords:

swarm simulation, dance performance