# Ellis Auditorium: The Design of a Scalable, Fun and Beautiful, Socializing Webcast Experience

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## ABSTRACT

Today's commercial webcast applications are largely designed as virtual lecture halls optimized to support a speaker's need to present information such as speaker audio, supporting slides and to receive audience questions. This focus on information delivery ignores the many additional reasons why people attend real-world events as well as the social dynamics at these events.

We believe that socialization, both casual (running into an old friend or making a new acquaintance) and formal (coordinating or meeting up with a friend, group, or class) is a critical part of real-world, live events. Believing that webcast counterparts should be no different, we created the Ellis Auditorium, a webcast application that includes innovative design elements such as Cosmo, a "scalable socializer".

## Keywords

Social translucence, funology, webcast, persistent conversations, scalable socializer.

## 1. INTRODUCTION

After conducting traditional webcasts for several years, we have learned that a significant number of students attempt to enter the event well before the event start time. However, all commercial applications we have seen fail to accommodate this pool of eager attendees, showing only a splash screen "Be sure to come back soon!" until the event starts. In contrast, the Ellis Auditorium design focuses on the attendees and the connections between them, starting with exploiting this early-attendance behavior by incorporating a lobby containing a strong social dimension.

In general, we designed the Ellis Auditorium to meet the following goals:

1) Create a large—cost-effective—auditorium where Ellis students can listen to, and ask questions of, prominent speakers.

2) Provide a place for casual encounters amongst Ellis students.

3) Transmit the feeling of being taken care throughout the whole auditorium experience—compare to the usher with the flashlight.

To further inform our design, we actually attended to live real world events and selectively incorporated references in the Ellis Auditorium to help recreate an appropriate ambience. These references included subtle ones such as lightning changes across stages (see figures 1, 3, and 4), or flickering lights to give a five-minute warning before the event starts.

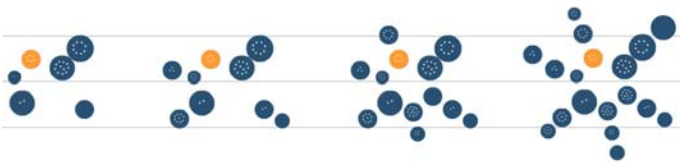

**Figure 2: Cosmo Scalability**

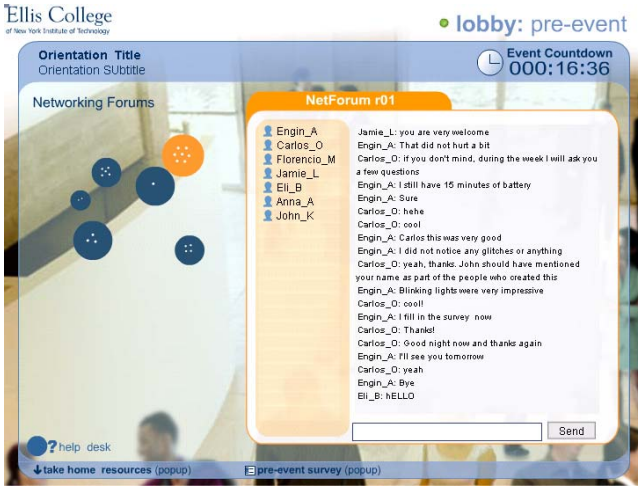


**Figure 1: Pre-event**

## 2. COSMO: THE SCALABLE SOCIALIZER

Inspired by the work of [1,2,3,4], we have designed Cosmo, which is what we call a scalable socializer. We define Cosmo as:

- A dynamic array of persistent chat rooms
- An accommodator of arriving attendees
- A scalable social navigation and visualization tool
- A buffoon that can turn simple phenomena into fun and beautiful experiences for event attendees

When an attendee arrives to the lobby, Cosmo places him/her in one of its six default chat rooms. After that, he/she is free to move about from one chat room to another. Chat rooms are represented in the interface by circles; dots inside the circle act as a social proxy [1] to reflect the people in that chat room. Cosmo places incoming attendees into chat rooms according to a simple algorithm: place the attendee in the most crowded chat room below a threshold. The threshold represents the point where conversations become too chaotic with additional participants. In the case of the Ellis Auditorium, we chose a threshold value of 10. For example, consider Joe, an event attendee, about to enter a lobby containing 29 people spread across the 6 rooms with the following attendee distribution: {3, 5, 0, 9, 12, 0}. Cosmo will place Joe in the chat room with 9 attendees since it is the most crowded forum with a population less than 10. We believe clustering people in this manner increases both the likelihood of, and perceived value in, spontaneous interaction. We could have also attempted to place attendees using predefined criteria such as shared interests; however, we purposely decided to capitalize on

the attendees' natural curiosity to move around and find interesting people while Cosmo tries not to leave alone those who decide not to move. Cosmo maximizes interactions without perceived imposition by attempting to accommodate the heterogeneous locomotion of a crowd.

As more attendees arrive, all six chat rooms will eventually reach their threshold. When the next attendee arrives, Cosmo will spawn a new chat room and place the attendee in it. The social proxy cues used in the interface advertise this new arrival to all other attendees in the lobby.

The location and layout of each new chat room on the lobby interface is important. As Cosmo spawns additional chat rooms, a starfish pattern slowly emerges out of the seemingly random layout of initial rooms. Beyond being a pleasing visual pattern, the starfish design also provides a sense of excitement over the shape that slowly unfolds in front of the attendees. For a group of strangers, it provides one more common topic to talk about. Finally, the starfish shape provides a more affordable way for people to identify and communicate their location.

Hovering over a particular chat room shows the name of the chat room and the list of the people who are there, including thumbnail pictures of the attendees when available. This approach balances the need to provide easy location without cluttering the UI with distracting visuals and tools.

When the event countdown reaches zero, attendees are taken to the main event stage (Figure 4). They are "seated" in a row with the same people they were just talking to in the lobby. As with traditional webcasts, attendees see the presenters' slides and ask questions to the presenters. During the live event, attendees cannot move to other rows as we want to encourage them to focus on the lecture. However, they can "whisper". Whispering denotes here that only the people in the same row can listen to each other.

Once the lecture is over, the event producer clicks on a button to "usher" all attendees back to the lobby. There, attendees are free to move around again. They can also visit the Q&A rooms for a more personal interaction with the event speakers (Figure 3). These special rooms are similarly equipped to the live event stage with speaker audio and supporting visuals if needed. Another special room is the helpdesk, which is permanent across all three event stages, and is manned by an event staff member who stands ready to help. Furthermore, as all conversations are by design persistent, the newcomer to the helpdesk may be able to get what he needs by just reading the chat or for that case a slide (e.g. "In case of audio problems make sure your speakers are on …").

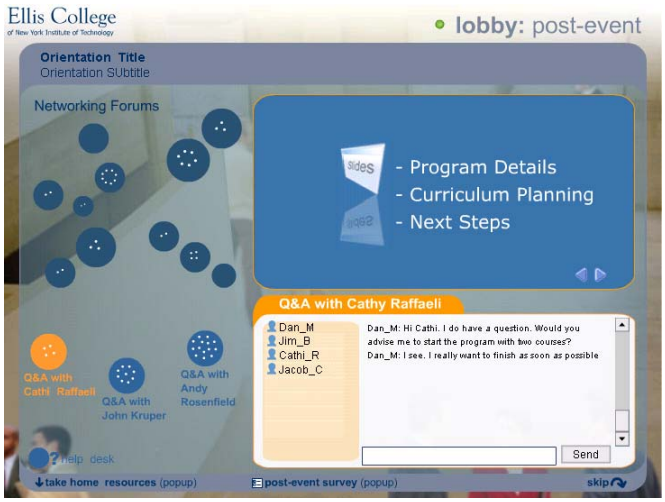


**Figure 3: Post-event**

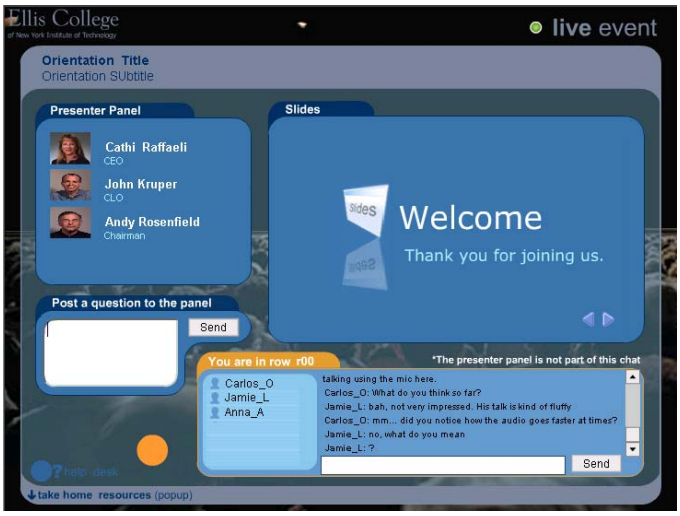


**Figure 4: Lecture**

## 3. CONCLUSIONS AND FUTURE WORK

Initial testing of the Ellis Auditorium is encouraging and leads us to continue working in this design direction. We plan to enhance the socializer's use of fun interactions. Moreover, these new interactions would become malleable when exposed to the attendee's collective behavior. Possibilities include 1) providing additional emergent shapes along with the starfish and letting the attendees decide or vote on which they become; 2) adding better search capabilities; and 3) elevating the prominence of the newly arrived attendee who is placed in an initially empty chat room. For instance, the attendee's profile summary, video feed from a webcam, or other intriguing identifier could be briefly broadcast to the audience.

In addition, we want to better understand the effects of using persistent conversations in shaping attendee behavior. Finally, we want to explore using Cosmo for applications besides webcasts.

## 4. ACKNOWLEDGMENTS

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## 5. REFERENCES

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