

# PIPORNOT: Insects&Emergence

**7:00pm**

## **Insects & Emergence: Collective Behavior of Social Groups**

**A lecture by Yuko Ulrich, Postdoctoral Fellow at The Rockefeller University**

Yuko will discuss the ins-and-outs of ant colonies and how ants function together as an organism. She will share with us her recent research on 'division of labor', while also introducing examples of emergence in the animal world.

**7:45pm**

## **Humans & Emergence: Collective Behavior in Practice**

**Interactive games by Aniek Ivens, Postdoctoral Fellow at The Rockefeller University**

Aniek will lead us (you! willing participants!) in a series of games based on the concepts presented in Yuko's lecture. Play along and help us gather data with an experimental task-oriented game devised by Aniek and Yuko, to test the 'reaction threshold model' on humans. Other games will explore how humans behave in groups, be it with clearly assigned leaders or in 'flocks' with no leaders at all.

**9:00pm**

## **alive stop-motion by Kai Kleinbard**

Kai Kleinbard shares his research on emergence, inspired in part by touring Yuko and Aniek's ant behavior experiments at the Kronauer Lab. Using an open ended improvisational score, Kai imagines moving at 24-frames per second, interacting with the space around him as if he's a documentarian of his own experience.

**PIPORNOT (= Primus Inter Pares + or NOT)** is an immersive exploration of temporary community-building through insect eusociality. Communicating with scientists who study insect's social evolution and behavior, we aim to examine the concept of 'community' by paralleling human society with insects' non-hierarchical systems. The concept of 'eusociality' is a phenomenon unique to the insect world and can be understood as the overarching rules that define a colony's progress and structure, as well as, how these rules evolved over time. This is an ongoing project, where we will continue to explore visual methods of community engagement through inspiration from scientific studies on insect world.

## **TEAM PIPORNOT**

### **Yuko Ulrich**

Yuko received her M.S. from the University of Lausanne, Switzerland, where she worked on the sociogenetics of halictine bees. She then did a Ph.D. at ETH Zurich, also in Switzerland, where she studied how pathogens spread within colonies of bumblebees. Yuko is now a Postdoctoral Fellow at The Rockefeller University and she works on division of labor in the clonal raider ant *Cerapachys biroi*.

### **Aniek Ivens**

Aniek is a scientist and improvisation actress and coach. The overarching theme of her work is 'cooperation', be it between the members of an improv team on stage or between the ants that she studies. Her scientific research focusses on the evolution and ecology of mutualisms, cooperation between different species. During her undergraduate studies at Universities of Wageningen and Groningen (The Netherlands) she studied these interactions in fungus-growing ants and termites. During her PhD (shared between Groningen and the University of Copenhagen) she combined theoretical modeling with empirical work on another example of farming practices by social insects: underground ants farming root-aphids, which she also studies here in the US at The Rockefeller University. As an improviser, she trained, performed with and coached various improv groups in the Netherlands. Here in the United States she trained at the Alan Alda Center for Communicating Science (Stony Brook University), as well as at The People's Improv Theater and The Magnet. She can be found on stages throughout NYC performing with her improv team 'The-Hand-me-Downs' or in her solo-improv show 'Dr. Aniek Discovers'.

### **Kai Kleinbard**

Kai is an Alexander Technique teacher, has over a decade of experience working with young learners with executive function difficulties, pioneering a method combining embodiment and learning for people with special needs. Kai co-founded the bodyLITERATE Research Initiative, an organization that researches the connections between embodied and emergent learning. As a choreographer, Kai makes dances that mimic the simple emergent structures of nature, including flocking birds, insect behavior and schools of fish. As an improviser, Kai builds movement scores where there is enough order to create recognizable patterns, while being open-ended to allow spontaneous interactions.

### **Julia Benedict**

Julia is a theater-maker and a writer, who is interested in human behavior and our social systems. She examines patterns of how we, as humans, relate to one another and the possibilities of the possibilities of connection and communication, through narrative and installation.

### **aricoco**

aricoco is an interdisciplinary artist based in Brooklyn, New York. She launched the project PIPORNOT during the fellowship with Target Margin Theater, Institute for Collaborative Theater Making in 2014. Since Spring 2015, the project has been supported by Culture Push. This event is her final public component of the project as a Capture Push's fellow for Utopian Practice.

This event is made possible with the warm support and guidance from Culture Push. We'd also like to extend our gratitude to University Settlement. Special thanks to those who made generous contributions to our Indiegogo campaign. Many thanks to those who helped us along the way; including all the workshop participants, as well as Kanako Hiyama, SEN Tadatoshi (photographer) and Rie Hasegawa for their help with this event.