

# **Causality, Analyticity, and Superluminal Propagation Workshop**

## **Monday October 13th, 2008**

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### **337 West Hall**

**9:00-10:30 am COFFEE and BAGELS**

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### **340 West Hall**

**Chair: Ratindranath Akhoury (University of Michigan)**

**10:30-11:45 am Alexander Dolgov  
(University of Ferrara, INFN Ferrara, Italy and ITEP,  
Moscow)**

*“Superluminal propagation and Quantum Anomalies”*

**11:45-1:00 pm Tanmay Vachaspati (Case Western Reserve University)**  
*“NEC Violations and a Time-Symmetric Cosmology”*

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### **340 West Hall**

**2:30-3:45 pm Cedric Deffayet (APC-CRNS Paris)**  
*“New Results on Spherically Symmetric Solutions of Massive  
Gravity”*

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### **337 West Hall**

**3:45-4:15 pm COFFEE BREAK**

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### **340 West Hall**

**4:15-5:30 pm Cristian Armendariz-Picon (Syracuse University)**  
*“Producing Scale-Invariant Perturbations in a Radiation-  
Dominated Universe”*

# **Causality, Analyticity, and Superluminal Propagation Workshop**

## **Tuesday October 14th, 2008**

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### **337 West Hall**

**9:00-10:00 am COFFEE and BAGELS**

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### **340 West Hall**

**Chair: Alexander Vikman (New York University, CCPP)**

**10:00-11:15 am Viatcheslav Mukhanov  
(Ludwig-Maximilians-University Munich, ASC)  
“*K-Essence*”**

**11:15-12:30 pm Ken Olum (Tufts Institute of Cosmology)  
“*Superluminal travel in general relativity*”**

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### **340 West Hall**

**2:00-3:15pm Benjamin Grinstein (UCSD)  
“*Acausal Yet Unitary QFT’s and the Lee-Wick  $O(N)$  Model*”**

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### **337 West Hall**

**3:15-3:45 pm COFFEE BREAK**

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### **340 West Hall**

**3:45-5:00 pm Richard Woodard (University of Florida)  
“*Causal Effective Field Equations from the Schwinger-Keldysh  
Formalism*”**

# **Causality, Analyticity, and Superluminal Propagation Workshop**

## **Wednesday October 15th, 2008**

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**337 West Hall**

**9:00-11:00 am COFFEE and BAGELS**

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**340 West Hall**

**Chair: Mark Trodden**  
**(University of Pennsylvania/Syracuse University)**

**11:00-12:15 pm Holger Bech Nielsen**  
**(Niels Bohr Institute, Blegdamsvej)**  
*“Random Dynamics”*

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**340 West Hall**

**2:00-3:15pm Andrey Gruzinov (New York University)**  
*“Black Holes in Scalar Field Theories”*

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**337 West Hall**

**3:15-3:45 pm COFFEE BREAK**

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**340 West Hall**

**3:45-5:00 pm Vitaly Vanchurin (University of Munich)**  
*“Superluminal Signals in K-Essence Cosmology”*

# **Causality, Analyticity, and Superluminal Propagation Workshop**

## **Thursday October 16th, 2008**

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### **337 West Hall**

**9:00-9:30 am COFFEE and BAGELS**

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### **340 West Hall**

**Chair: Alexander Dolgov**  
**(University of Ferrara, INFN Ferrara, Italy and ITEP, Moscow)**

**9:30-10:45 am David Garfinkle (Oakland University)**  
*“Gravitational Collapse in Einstein-Aether Theory”*

**10:45-12:00 pm Chris Gauthier (University of Michigan)**  
*“Classical Solutions in K-Essence”*

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### **340 West Hall**

**1:30-2:45 pm Alexander Vikman (New York University, CCPP)**  
*“Superluminality and Black Holes”*

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### **337 West Hall**

**2:45-3:00 pm COFFEE BREAK**

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### **340 West Hall**

**3:00-4:15 pm Eugeny Babichev (APC Paris)**  
*“TBA”*