



# More Graphics, Imaging, and Vision

CS 355: Interactive Graphics and Image Processing

# Physically-Based Modeling



2,320,413 hairs



# Physically-Based Modeling



And sometimes they didn't quite get it right...

# Physically-Based Modeling

## Simulating Liquids and Solid–Liquid Interactions with Lagrangian Meshes

Pascal Clausen

Martin Wicke

Jonathan R. Shewchuk

James F. O'Brien

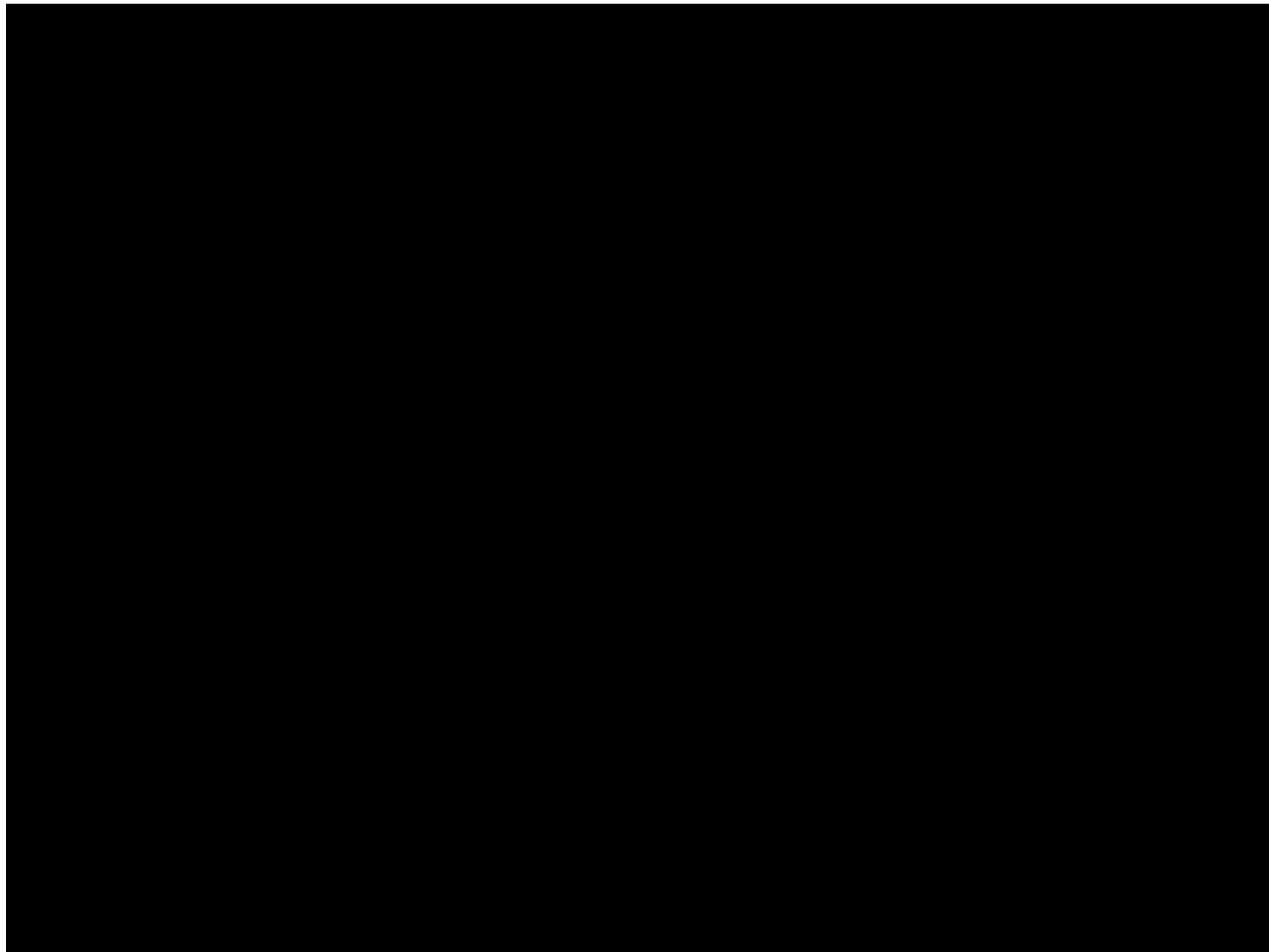
University of California, Berkeley

ACM Transactions on Graphics

# Physically-Based Modeling

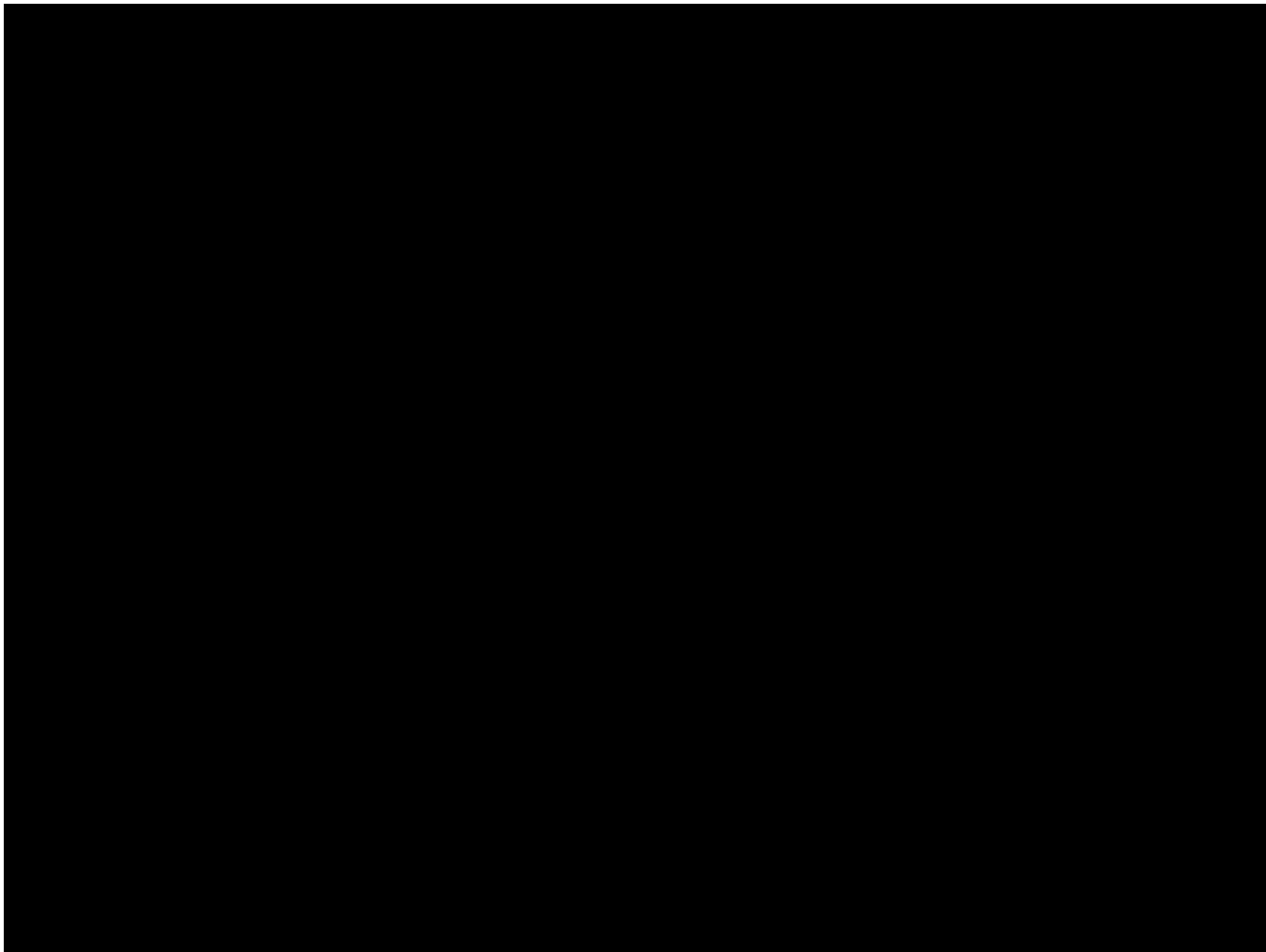


# Image-Based Rendering



Facade modeling system, Paul Debevec, 1997

# Image-Based Rendering



“The Campanile”, Paul Debevec, 1997

# Phototourism

## Photo Tourism Exploring photo collections in 3D

Noah Snavely   Steven M. Seitz   Richard Szeliski  
*University of Washington*   *Microsoft Research*

SIGGRAPH 2006



# Image Retargeting



Shai Avidan  
Mitsubishi Electric Research Lab  
Ariel Shamir  
The interdisciplinary Center & MERL

# Stereo Image Completion

Remove



Morse, Howard, Cohen, and Price, 2012

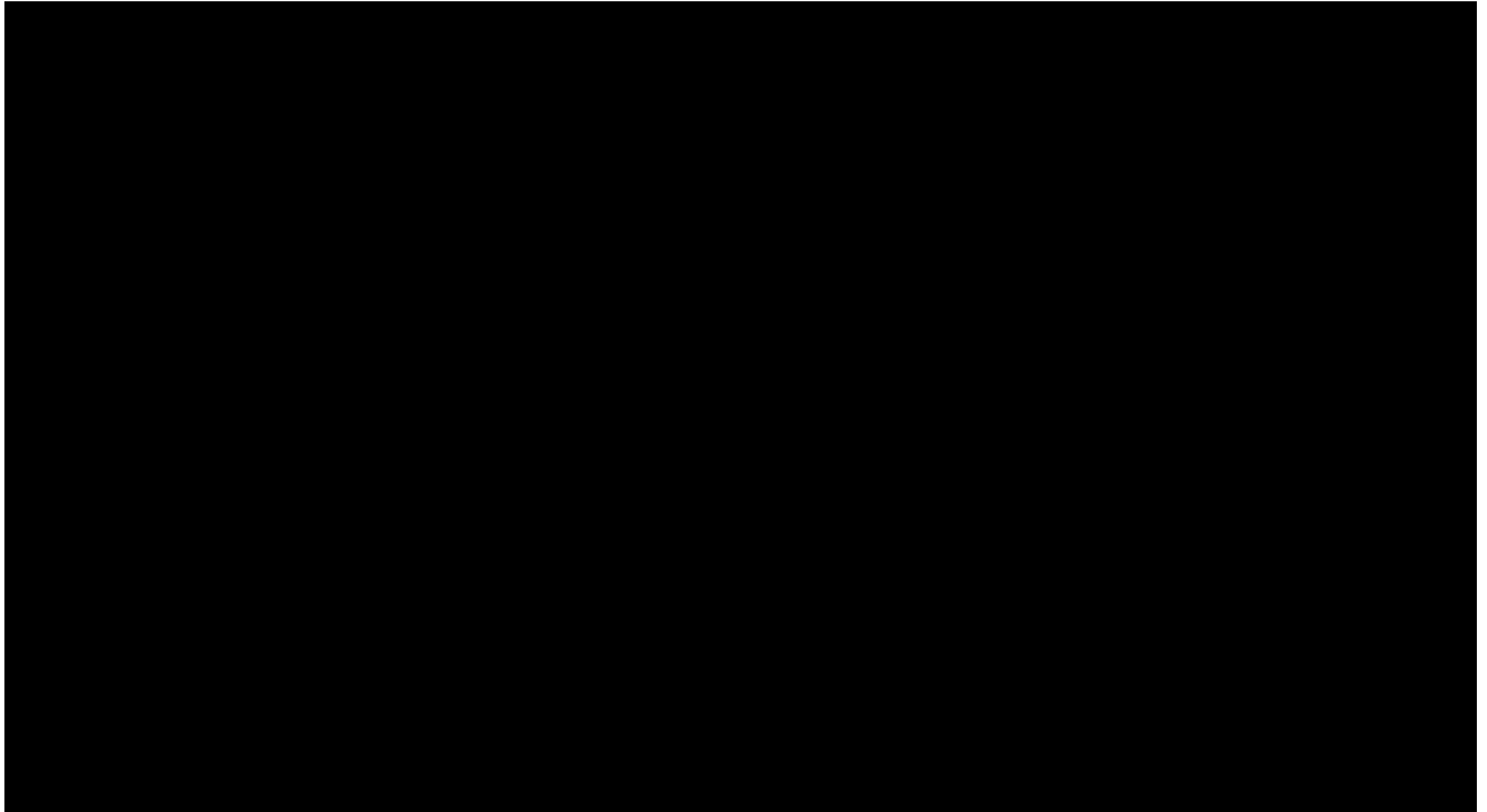


# Stereo Image Completion



Morse, Howard, Cohen, and Price, 2012

# Depth-Aware Effects



Morse and Abbott, 2013

# SIGGRAPH Papers Preview

[Click Here for Preview](#)



# Coming up...

- Wrapping up
- Previews of CS 450, CS 455, CS 456