

◆ PHYSICS AND GEOLOGY COLLOQUIUM ◆

THE SCIENCE OF CLIMATE CHANGE AND WHY YOU SHOULD BELIEVE IT

Professor Andrew Dessler

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3:00, Wednesday, February 3rd

Lowman Student Center Theater (112)

Note: Theater is on the West side of the LSC first floor. Due to changes in external elevation, various LSC entrances may directly access the ground, first or second floors.

Unlike what you might hear in the public debate, much of the science of climate change is extremely solid. There is no question that, when you add a greenhouse gas to the atmosphere, the planet will warm. There is no question that human activities are increasing the amount of greenhouse gas in our atmosphere. There is no question that the Earth is currently warming, and it is warming about as much as you would expect from the addition of greenhouse gases. This science is not new — much of it is a century or more old and it has stood the test of time. And we can be 100% certain about some of the impacts of this: more extreme temperature events, rising sea levels, acidification of the oceans, changing precipitation patterns. The uncertainty is in how much of these changes will occur, as well as uncertainty in how this warming will impact humans and those aspects of the environment that we care about. However, one conclusion is clear: If climate change falls toward the upper end of the predicted range, we will truly be remaking the face of the planet, and the results may be dire.