

**Eversource Energy Center**  
Co-sponsored with  
**Environmental Engineering Program**  
**COLLOQUIUM Presented by**



**Dr. Eugenia Kalnay**  
**Safa Motesharrei, Jorge Rivas**  
**University of Maryland**  
**Distinguished University Professor**  
**Dept. of Atmospheric and Oceanic Science**

**“Modeling Sustainability:  
Need to Couple Earth and Human System Models”**

**Friday – April 13, 2018**  
**12:15-1:15 p.m.**  
**Castleman Rm 212**

**Seminars will be broadcasted LIVE at:**  
<https://uconnvtc.webex.com/join/EversourceEnergyCenter>

Eugenia Kalnay Bio:  
Distinguished University Professor

Prior to coming to UMD, Eugenia Kalnay was Branch Head at NASA Goddard, and later the Director of the Environmental Modeling Center (EMC) of the National Centers for Environmental Prediction (NCEP, formerly NMC), National Weather Service (NWS) from 1987 to 1997. During those ten years there were major improvements in the NWS models' forecast skill. Many successful projects such as the 60+years NCEP/NCAR Reanalysis (the paper on this Reanalysis has been cited over 10,000 times), seasonal and interannual dynamical predictions, the first operational ensemble forecasting, 3-D and 4-D variational data assimilation, advanced quality control, and coastal ocean forecasting. EMC became a pioneer in both the fundamental science and the practical applications of numerical weather prediction.

Current research interests of Dr. Kalnay are in numerical weather prediction, data assimilation, predictability and ensemble forecasting, coupled ocean-atmosphere modeling and climate change and sustainability. Zoltan Toth and Eugenia Kalnay introduced the breeding method for ensemble forecasting. She is also the author of other widely used ensemble methods known as Lagged Averaged Forecasting and Scaled LAF. Her book, Atmospheric Modeling, Data Assimilation and Predictability (Cambridge University Press, 2003) sold out within a year, is now on its fifth printing and was published in Chinese (2005) and in Korean (2012). A second edition is in preparation. She has received numerous awards, including the 2009 IMO Prize of the World Meteorological Organization, and is a member of the UN Scientific Advisory Board (2013), the NOAA Scientific Advisory Board (2016) and other Scientific Boards