



American Nuclear Society Northern California Section

Dinner Meeting Announcement

*Surprises and Black Swans in energy
forecasts, past and future*



Wednesday, April 29, 2015

Max Henrion, PhD, CEO of Lumina Decision Systems,
Los Gatos, California

Retrospective review of the last 30 years of forecasts of energy quantities and prices in US DoE's Annual Energy Outlook shows that we are often surprised by actual values turning out quite different from our estimates. The same is true even of estimates of fundamental physical constants, as well as expert estimates of the future costs of nuclear, solar, and other low-carbon energy technologies. Actual values are too often many standard deviations from estimates. According to Nassim Taleb "Black Swan" events are unavoidable and inherently unpredictable. But might it be possible to reduce how often and how much we are surprised? Dr. Henrion will present three different approaches:

- Apply error distributions from past AEO forecasts to obtain better calibrated uncertainty estimates.
- Explore the reasons for past surprises in energy forecasts to see if we can get earlier warnings of potential surprises.
- Conduct brainstorming with groups of experts to identify possible future surprise events that might affect the forecast quantities.

ANS members and non-members welcome.

To make reservations visit:

<http://local.ans.org/norcal/meetings>

or contact: Tim Lloyd,

ANS NORCAL Program Committee Chair

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Dinner: 6:30 p.m.
Program: 7:30 p.m.
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