**Professor Clint Sprott**

****Born in Memphis, Tennessee in 1942, Clint Sprott developed an interest in physics early in his childhood. He went on to earn a B.S. at the Massachusetts Institute of Technology in 1964 and a Ph.D. in physics at the University of Wisconsin in 1969. He spent 1970-1972 at the Oak Ridge National Laboratory in Tennessee. Then in 1973 he returned to the University of Wisconsin – Madison to become Professor of Physics. His research is in plasma physics and chaos, and he is currently working on complex nonlinear dynamical systems.

In an effort to share with the public his lifelong interest and enthusiasm for physics, Professor Sprott has presented “The Wonders of Physics” since 1984.

🙣

**Acknowledgements**

Thanks to all who helped put this program together.

A special thanks to the following:

Adam Blonsky Joe Dickenson? Tara Keenan

Jim Latimer Ed Leonard Marty Lichtman

Aryka Narf Steve Narf Paul Nonn

Mike Randall Dale Schutte Zane Shahrani

Peter Weix Michael Winokur Bill Young

Bill Zimmerman

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The 32nd Annual Presentation of

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featuring

*Professor Clint Sprott*

And The UW Physics Department

2103 Chamberlin Hall • 1150 University Ave.

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***2015***

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Professor Sprott has been accused of breaking the laws of physics! Is that possible? If not, how can physicists explain the seemingly impossible things that happen in some experiments? Join Professor Sprott and the UW-Madison Physics Crew as they unravel this mystery!

**PROGRAM**

**Prologue (Marty Lightman, Peter Weix, Clint Sprott)**

**Motion (Steph Kubala):** Non-Newtonian fluid  Bead chain syphon  Stack of cards  
 Double cone on rails  
 **Faster than “g” stick**

**Heat (Ed Leonard):** Boiling water with ice   
 Freezing by evaporation  
 Leidenfrost Effect  
 Liquid nitrogen cannon\*

**Sound (Akire Trestrail):**  
 Ultrasound   
 Oscilloscope waveforms  
 Range of hearing  
 Ultrasonic levitation

**Electricity (Mike Randall):** Ohm’s Law board   
 Electric pickle   
 States of matter  
 Plasma ball  
 Musical Tesla Coil\*

**Magnetism / E&M (Andrew Seltzman):** Lorentz force   
 Superconductor levitation  
 Induction heating  
 Microwaves

***\*Please note that these demonstrations will produce a loud and/or sudden sound.***

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**Your donations to the “UW Wonders of Physics Fund” will help us to continue these presentations. To make a donation please visit**

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***Thank you!***

Coordinator: Peter Weix

Visuals & Sound Effects: Steve Narf

Lighting: Bill Zimmerman

Theme Music: Jim Latimer &

Frank Ferriano

**Magnetism (Michael Winokur):** Oersted Effect   
 Ferrofluid   
 Lenz’s Law  
 Can crusher\*  
 Levitated ball

**Light (Marty Lichtman):** Spiral light pipe   
 Water light guide   
 Rainbow  
 Twinkling stars  
 Speed of light

**Epilogue (Clint Sprott):** Liquid Nitrogen Cloud