

• Upcoming Events

▪ January LMAG/Section Meeting: "Astronomical Photometry at Washburn Observatory"

- Thursday, January 24th, 5:30-7:00 PM
 - Speaker: Dr. James Lattis,



- [Madison Section Newsletter](#)
 - [Upcoming Events](#)
 - [January LMAG/Section Meeting: "Astronomical Photometry at Washburn Observatory"](#)
 - [ECN Meeting: "LENR Event and Discussion"](#)
 - [Section News](#)
 - [Upcoming Meetings](#)
 - [Regular Meetings](#)
 - [Section Meetings](#)
 - [Life Member Affinity Group](#)
 - [IEEE-MSN-ECN Networking Meetings](#)
 - [Membership Upgrades](#)
 - [About IEEE](#)
 - [Madison IEEE Section](#)
 - [Sponsored Content](#)
 - [DLSEMC: We See You Through!](#)
 - [Contact Us](#)

UW-Astronomy Department

- Location:
 - UW Space Place
 - 2300 South Park Street
 - Suite 10 0, Atrium Lower Level
 - Madison, Wisconsin 53713
- Please Register at the IEEE-Madison [event page](#).

Presentation Title: Astronomical Photometry at Washburn Observatory: Development of Electronic Light Measurement.

Talk: Quantitative measurement of starlight came of age at Washburn Observatory in the decades just before the second World War. UW astronomers exploited the photoelectric effect along with the rapidly developing technologies of electronics to put stellar astronomy on a firm foundation and produce great advances in our understanding of galaxies, including our own. This talk will explore the Wisconsin contributions to the technology of astronomical photometry and its scientific fruits.

Bio: Dr. James Lattis is a historian of astronomy. He is a faculty associate in the UW-Madison Dept. of Astronomy and director of UW Space Place. His specialties include astronomy in the age of Galileo and the history of astronomy in Wisconsin. He is currently writing a book on the history of Washburn Observatory.

▪ ECN Meeting: "LENR Event and Discussion"



- Thursday, January 31st, 7:45 AM - 10:00 AM
 - Event: E-Cat SK Product Rollout and Discussion
 - Location:
 - Sector67
 - 56 Cory Street
 - Madison, Wisconsin 53704
 - Please Register at the IEEE-Madison [event page](#).
 - Bagels, Donuts and Coffee/Tea (FREE) will be served

Background:

This Entrepreneurs and Consultants Network Meeting is specifically to view a presentation on novel LENR technology in a commercial setting. The event will first view a live streaming event unveiling the latest device that uses LENR (Low Energy Nuclear Reactions) Technology dubbed E-cat SK developed by Leonardo Corporation. Opportunities for interactive questions will follow the viewing. A post viewing opportunity to discuss the technology will happen for those attending the local viewing.

The E-Cat SK device is one of several similar devices under development by competing corporations. Hints of the possibility of LENR reactions have been traced as far back as Ben Franklin with his lightning experiments. Fleischman and Pons investigated it and announced their research as "Cold Fusion" in 1989. It was immediately debunked as "junk science". However since then, careful research has shown that the reaction did in fact generate more energy as heat than the input energy. In addition, the Department of Defense has offered commercialization patents for related reactions. In the past few months, several periodicals have published articles about LENR.

One article titled "Scientists in the U.S. and Japan Get Serious About Low-Energy Nuclear Reactions: It's absolutely, definitely, seriously not cold fusion" was published in IEEE Spectrum

[here](#)

. The author, Michael Koziol points to two events that he finds significant:

A paper from Japanese researchers reporting excess heat production in hydrogen/deuterium loaded nanocomposites

[here](#)

The publication by the US Naval Institute of a paper titled 'This is Not Cold Fusion' by Michael Ravnitzky (not accessible) and a similar article published in Scientific American

[here](#)

For background on the original Fleischman and Pons research, see this Youtube video from "60 Minutes"

[here](#)

Event:

Italian-American inventor Andrea Rossi will be demonstrating a 27 kW E-Cat heater in operation, which he claims produces more energy than it consumes. He will show a test of the E-Cat which will include measurements of energy consumed and energy produced. Dr. Rossi will also discuss his business plan of providing industrial customers with E-Cat powered heat priced at a significant discount to current energy sources used in industry. During the event will be taking questions from the audience. We will forward any questions we have to the moderator.

If you are interested, but can't make the meeting, the Streaming Video will start at this

[link](#).

◦ Section News

- **Madison Elections Results:** Congratulations **Section Officers** Nate Toth (Chair), Hugh Schmidt (Vice Chair), Michael Stemper (Secretary) and Tom Kaminski (Treasurer). Congratulations also to the At-Large members, Clark Johnson, Dennis Bahr, San Rotter and Craig Heilman. Congratulations to the newly elected **PES-IAS Chapter Officers**, Dan Ludios (Chair), Eric Seversin (Vice Chair) and Michael Stemper (Secretary/Treasurer) and to the **LMAG** Chair (San Rotter) and Vice Chair (Charles Cowie). Thanks also to those other volunteers who help out: Charles Gervasi: 2018 Treasurer and FaceBook contributor, Nate Toth - Webmaster, Scott Olsen - Members hip Development Chair, Tom Kaminski - Newsletter Editor.
- **Renew your IEEE Membership:** It is that time of year to renew your IEEE Membership and help support the Madison Section. A portion of your dues goes to financially support the Section, allowing us to host events with little or no cost to members. To renew your membership, click on this [RENEW NOW](#) link.
- **First Tech Challenge Donation to Sector67:** The IEEE-Madison Section has donated \$500 to help sponsor an East High team via Sector67. The competition is discussed [here](#). According to Chris Meyer, This is the 3rd year of hosting an East High team and they are excited and happy for our support of East High in this endeavor. Our donation allows them to host the team for free and cover costs for the students to participate in the Fox Valley tournament (as well as the FIRST registration and parts they need to continue to build their machine). Anyone interested in **VOLUNTEERING** is welcome to get in touch, as they are always seeking mentors for the students learning programming, fabrication, electronics, machining, and so forth -- essential skills for today's technicians. Sector67 also partners with Tormach to provide a machine shop at the WI state and national competitions as shown [here](#).
- **Review of December EMB Meeting:** Gregg Miklashek lived up to the title of the talk, giving a laid-back presentation that hit on a number of points. Greg used the knowledge that primitive societies and remaining isolated societies living in a sustainable, stress-free way do not suffer from modern diseases, such as cardio-vascular problems. He briefly discussed the brain and how stress leads to neuro-chemical imbalances that definitely affect health. He discussed how he now lives reasonably stress free, hiking on the lovely local trails and how he avoids stressful situations, like air travel. Gregg said that he frequently meditates and lowers stress and suggested that everyone should meditate frequently.

- Review of the December PES-IAS Chapter Meeting:** (Review by Mike Stemper) On Tuesday, December 11, the newly-formed Madison chapter of the PES (Power & Energy Society) and the IAS (Industrial Applications Society) held its inaugural meeting in Engineering Hall on the UW (University of Wisconsin) campus. After introductions, Tom Kaminski, 2018 Chair of the Madison Section, put forth a slate of officer candidates for PES/IAS proposed by the Executive Committee of the Madison Section. The slate was approved by a show of hands. The new officers are: Chair: Dan Ludois Vice Chair: Eric Severson Secretary/Treasurer: Mike Stemper,

After the election, Dan Ludois gave a talk on his experience of starting up a new firm. The firm is C-Motive, which builds capacitive (electro-static) motors. The motivation for these devices is primarily the reduction of energy consumption. He led us from the theory of these motors through the process of development. He noted that although software startups are quite common now, hardware startups are less so, leading to potential investors having obstacles to their understanding. Eventually, a first prototype was produced. Given its slight advantages over existing technology (electro-magnetic motors), the market was unimpressed. Continued development gave several orders of magnitude more improvements, and led to an industry-university collaboration, led by WARF (the Wisconsin Alumni Research Foundation). Continuous fund-raising is necessary to keep a startup thriving. At the end of the talk, he answered questions and passed around some of C-Motive's motors.



- Review of December ECN/YP Meeting:** Chris Meyer gave a brief talk on the new facility. He showed us an incredible time-lapse video of the facility as they raised the whole roof one full story. Sector67 constructed all of the grid-iron work needed to raise the roof. After the roof was raised, Sector67 contracted to have a pre-cast concrete floor installed, effectively doubling the facility's space. Currently the second floor is only used for storage, but future upgrades will make it part of the habitable space.

◦ Upcoming Meetings

- Follow us on Facebook:** <https://www.facebook.com/IEEEMadison>
- IEEE-Madison Section/LMAG Meeting:** Jim Lattis, Director of the UW-Space Place will give a historical talk on the development of photometry at the Washburn Observatory. UW Space Place is located at 2300 S. Park Street in the Villager Mall, which is just north of the Beltline Highway. Plenty of parking is available and the talk is adjacent to the new home of the Madison Science Museum.
- ECN Meeting:** Andrea Rossi: Fraud or Visionary? This meeting follows past events on LENR technology hosted by the IEEE-Madison. The inventor, Andrea Rossi, is controversial -- many believe him to be a complete fake, but he has persisted and evolved his "E-cat" technology in stages, showing improvements in each new generation. His previous commercialization attempt, a one-year, one Megawatt (thermal) plant test resulted in a technical success, but a commercial failure. He has admitted that the technology, a solid-based nickel-hydrogen fueled device, was difficult to control and suffered extensive corrosion damage by the end of the one-year test. He also admitted that his health was

affected because he spent long hours observing the reactions with shielding removed. His current attempt is installed in a customer's factory where it has been in operation since November.

I (Tom Kaminski, as ECN Chair) decided to stage this event. If Rossi is correct, this will be the start of a paradigm shifting energy era. I feel that Rossi may be the next Tesla. Engineering has had a number of conflicts such as the Edison/Tesla and Armstrong/Sarnoff battles. Come join us for this (historic??) breakfast event! Instead of popcorn, we will be serving Bagels and Donuts with coffee/tea.

◦ **Regular Meetings**

▪ **Section Meetings**

The third Thursday of January through May, and September through December is reserved for a meeting to provide recent research, developments, trends and/or innovations in one of our membership's technical areas.

▪ **Life Member Affinity Group**

The first Thursday of January, March, May, September and November is reserved for a meeting on a topic selected from a broad range including such areas as technology, science, history, culture and leisure.

▪ **IEEE-MSN-ECN Networking Meetings**

- Purpose: Presentations, Discussions, networking
- Date: First Thursday of even-numbered months
- Time: 11:45 AM to 1:00 PM
- Location: Varies
- Process: Members are encouraged to make introductions, describe endeavors, and make request for: contacts in target companies, needs, resources.

◦ **Membership Upgrades**

Those interested in upgrading their IEEE membership level should send their resumes or other information showing five years of significant performance in an IEEE-designated field to Charles J Gervasi via email at [cj\(at\)cgervasi.com](mailto:cj(at)cgervasi.com). Madison Section Board will attempt to find Senior IEEE members knowledgeable in the applicant's area of practice who may be able to provide references. You are invited to attend the informal networking portion of the monthly Section meetings (starting at 11:30am) to meet the Section Board members and discuss intentions.

◦ **About IEEE**



The Institute of Electrical and Electronics Engineers or IEEE (read Eye-Triple-E) is an international non-profit, professional organization dedicated to advancing technology innovation and excellence for the betterment of humanity. IEEE and its members inspire a global community through IEEE's highly cited publications, conferences, technology standards, and professional and educational activities. It has the most members of any technical professional organization in the world, with more than 300,000 members in around 150 countries. The IEEE consists of 38 societies, organized around specialized technical fields, with more than 300 local organizations that hold regular meetings. Discover what IEEE Member Discounts can offer you. The Member Discounts portfolio consists of insurance products and programs for the home, office and travel, all at excellent

group rates and reduced pricing. Visit IEEE Member Discounts to see what's available in your location and enjoy the savings. For more information, please visit:

IEEE.ORG.

◦ **Madison IEEE Section**

The IEEE-Madison Section of the IEEE is a section in Region 4 of the IEEE-USA organized to serve IEEE members in the Madison, WI area with over 600 members. The 2017 Officers and Board Members are Tom Kaminski - Chair, Nate Toth - Vice Chair, Charles Gervasi - Treasurer, Steve Schultheis - Secretary, Nate Toth - Webmaster, Tom Kaminski - ECN Chair, Dennis Bahr - Engineering in Medicine and Biology Chapter Chair, Chuck Cowie - Life Member Affinity Group Chair, San Rotter - Life Member Affinity Group Vice Chair, Scott Olsen - Membership Development Chair, Members at Large: Clark Johnson, Craig Heilman, Dennis Bahr, Sandy Rotter.

◦ **Sponsored Content**

DLSEMC: We See You Through!

Standards Update Required for Medical Compliance



The new 4th Edition IEC/EN 60601-1-2 Medical Device for EMC is now in effect. This new standard has several changes and includes additional test requirements, including more stringent testing criteria, a greater emphasis on risk management requirements, higher immunity levels and multiple locations for intended use with different testing criteria to name a few.

New FDA Requirements now include immunity from RFID devices, using AIM 7351731 as the preferred method of compliance. There is no grandfather clause for past testing and performance. D.L.S. offers a comprehensive design review and transitional analysis to help determine the specific requirements needed to maintain existing products compliance, and to confirm new products meet the new standards requirements as well. Contact us today.



Schedule a transitional analysis to determine the current compliance requirements for your product

847-537-6400 • www.dlsemc.com



EMC / Environmental Product Safety / Wireless Testing & Consulting

Wheeling, IL • Genoa City, WI

▪ Contact Us

The IEEE-Madison Section has a number of volunteer positions open if you are interested in helping out. Please direct any questions or comments to Tom Kaminski (Newsletter Editor) via email to [tjkaminski\(at\)ieee.org](mailto:tjkaminski(at)ieee.org).

The IEEE Madison Section Newsletter Published 9 times per year (Jan-May, Sep-Dec) by the Madison, Wisconsin Section of the Institute of Electrical and Electronic Engineers (IEEE), for its members in South-Central Wisconsin. Online at <http://ieee-msn.truenym.net/> For address changes: notify IEEE headquarters at: <http://www.ieee.org/> or address-change@ieee.org. Editorial or comments contact: Tom Kaminski <tjkaminski@ieee.org>. Permission to copy without fee all or part of any material without copyright notice is granted provided the copies are not made or distributed for direct communication advantage, and title of the publication and its date appear on each copy. To copy material with a copyright notice requires specific permission. Please direct all copyright-related inquiries or requests to the IEEE Copyright Office. Thank you.

Madison Section : <http://sites.ieee.org/msn/>

Manage your IEEE Communication Preferences at the [IEEE Privacy Portal](#)