



NMSR Reports

The Newsletter of the
New Mexicans for Science and Reason

NMSR Reports, David E. Thomas, Editor, 801 Fitch Ave., Socorro, NM 87801 © 2017

MARCH MEETING: NEW MEXICANS FOR SCIENCE AND REASON WILL HEAR

Dave Thomas

on **“What’s New in Creationism?”**

**==>CNM MAIN CAMPUS,
Student Resource Center<==**

==>Room 204<==

Bring a friend!

FUTURE MEETINGS ANNOUNCED

March 8th, 2017 NMSR Meeting: Dave Thomas, on “What’s New in Creationism?”



A lot has happened since Dave’s last update on those wacky creationists (1993). There’s Intelligent Design, and the newly-opened Ark Encounter, just for starters. Dave will also look at creationist doings, from New Mexico to the White House.

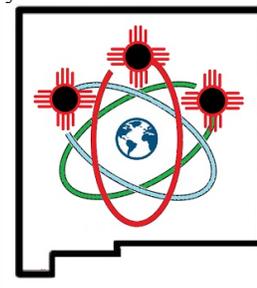
7 PM Wednesday February 8th, CNM Main Campus, Student Resource Center, room 204 (@ Richard Barr Boardroom).

April 12th, 2017 NMSR Meeting: March for Science, New Mexico!

The national March for Science is scheduled for April 22nd, 2017 (Earth Day), in Washington, D.C. Rush Holt, head of the American Association for the Advancement of Science (AAAS), has voiced his support for the planned protest march, saying that people were “standing up for science”.

The organizers of the March For Science have declared that they champion publicly funded and publicly communicated science as a pillar of human freedom and prosperity. “We unite as a diverse, nonpartisan group to call for science that upholds the common good, and for political leaders and policymakers to enact evidence-based policies in the public interest.”

In addition to the Washington D.C. event, science marches are scheduled all over the country, and all over the world. Here in New Mexico, marches have been organized by groups in Albuquerque, Santa Fe, Socorro and Las Cruces. At NMSR’s April 12th meeting, representatives from some (we hope all) of these groups will describe what their cities are planning for Earth Day, to follow ten days later (April 22nd, 2017). Mark your calendars!



www.facebook.com/marchforscienceSFNM/

www.facebook.com/marchforscienceABQ/

www.facebook.com/sciencemarchsocorronm

www.facebook.com/MarchforScienceLC/

New Mexicans for Science & Reason (NMSR)

NMSR is a non-profit group with the goals of promoting science, the scientific method, rational thinking, and critical examination of dubious or extraordinary claims. NMSR meets at 7 PM on the second Wednesday of each month, in Albuquerque, New Mexico, at CNM's Student Resource Center, room 204 (@ Richard Barr Boardroom). NMSR Reports is its official newsletter.

NMSR officers:

Dave Thomas, President

801 Fitch Ave., Socorro, NM 87801
nmsrdave@swcp.com

John Covan, Vice-President

jmcovan@juno.com

Nancy Shelton, Treasurer

11617 Snowheights NE, Albuquerque, NM 87112
nshelton10@comcast.net

Eddy Jacobs, Resident Neutron Generator

eddyjacobs88@gmail.com

Mark Fraser CNM Sponsor

ippon@earthlink.net

John Geohegan, Past President

jgeoh@swcp.com

Kim Johnson, Industrial Physicist

kimber@comcast.net

Marilyn Savitt-Kring, Science Mom

Harry Murphy, Physicist, Medical Quackery

Membership: \$20/year, includes newsletter, make your check payable to NMSR, send to treasurer (Shelton). Newsletter available in hard-copy and downloadable PDF.

NMSR Advisors:

- **Mark Boslough,**
Physicist (Impacts, Climate Change, Global Warming). Sandia National Labs.
- **Kendrick Frazier**
Editor, Skeptical Inquirer
- **John Geissman**
Professor of Paleomagnetism, UNM
- **Alan Hale**
Southwest Institute for Space Research
- **Randy Thornhill**
Professor of Biology, UNM

Cyber-Cypher Clue: Y = V.

Bonus Puzzle Clue: Turn it on its head.

WANTED: READER ARTICLES & COMMENTARY

Got something to share with NMSR members? Send it in! ATTN: Dave Thomas, Editor, NMSR Reports.

REMEMBER, our next NMSR meeting is at 7 PM on **WEDNESDAY, MARCH 8th, 2017,** at Student Resource Center, room 204 **at CNM!**

PUZZLE TIME!

[Please send solutions to Dave Thomas at: nmsrdave@swcp.com, or at 801 Fitch Ave., Socorro NM 87801.]

Cyber-Cypher: MARCH PUZZLE

(Submitted by Dave Thomas)

The following letters are a simple substitution cypher. If R stands for L, R will stand for L everywhere. Your Cyber-Cypher Clue: Clue? Oh, well - if you must, see p. 2.

" O X H E M B O J O C W G J C D
 O C B H T H N O M W W
 H Y V G H I N H C L J C D B H J H P
 M I G H M B P . V O U M P
 O X H V B L V I M W , Z C P O
 H P P H I O V M W N C Z Z M I G . "
 - - L B C Z " I V I H O H H I
 H V A X O J L C D B " S J
 A H C B A H C B U H W W

SUPER SECRET WORD!

However you prefer to do the cypher itself (above or below), simply duplicate those actions on the alphabetized row of cypher letters below. You'll build an answer key, and you'll also reveal - the Super Secret Word!

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

FEBRUARY CYPHER SOLUTION

"THE VERY POWERFUL AND THE VERY STUPID HAVE ONE THING IN COMMON. THEY DON'T ALTER THEIR VIEWS TO FIT THE FACTS. THEY ALTER THE FACTS TO FIT THEIR VIEWS." - DR. WHO (TOM BAKER)

Esteemed February Code Crackers: Mike Arms*, Nancy Shelton*, Austin Moede*, Terry Lauritsen*. *Secret Word: "STORM DAY BUCKLE IN"

Need more Secret Word Cryptograms?

SOCORRO STUMPER

New puzzles every week at

www.nmsr.org/SocorroStumper.htm

March Bonus: “Isn’t that Special!”

Submitted by *Dave Thomas*

A few weeks after the inauguration of President John F. Kennedy, a math teacher at a small southwestern college told his students that they were living in a very special year. The professor said “The last time this happened, Billy the Kid was being tracked by Pat Garrett. The time before that, Suleiman II ended his reign as sultan of the Ottoman Empire.”

The March Bonus: When was (or is) the next time this type of “Special Year” occurred (or will occur)?

February Bonus: “What’s Your Sign?”

Submitted by *Dave Thomas*

Jim wants to make a political sign. At the art store, letters are priced according to a simple logical rule. Jim finds that he can purchase the letters to spell TRUMP for \$11, PENCE for \$12, and BANNON for \$14.

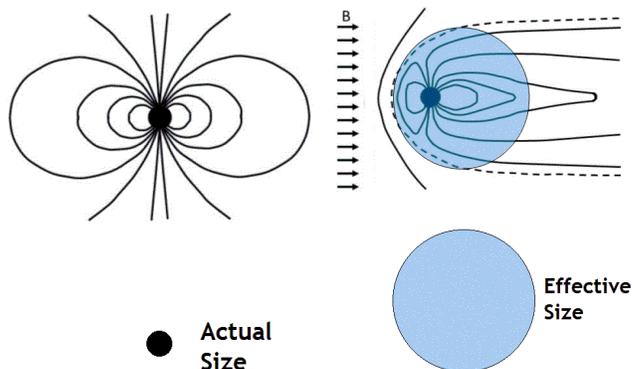
The February Bonus: How much will Jim need to buy the letters for IMPEACH? Answer: \$17 (vowels = \$3, consonants=\$2). Congrats: Paul Braterman (UK), Rocky S. Stone (NM), Eiichi Fukushima (NM), Mike Arms (NM), Eric Hanczyc (WA), Keith Gilbert (NM), Terry Lauritsen (NM), Glenn Branch (CA) .

February 8th, 2017 NMSR Meeting: J. Pace VanDevender, PhD, on “Detection of quark-nugget candidate for dark matter.”

When former Sandia physicist Pace VanDevender last spoke at NMSR (December 2005), he discussed the intriguing possibilities of ball lightning. This research eventually led to Pace’s new project, trying to explain the enigma of Dark Matter. We know from the way galaxies rotate “as a body” that there is more mass out there than we can detect at present. Gravitational lensing also confirms the presence of this “Dark Matter.” Dr. VanDevender said “Dark matter of unknown nature makes up 83% of the matter in the universe. ... There has been no confirmed evidence of the leading candidate: Weakly Interacting Massive Particle



(WIMP) in Direct, Indirect, or Accelerator Experiments.” Pace said the continuing failure to detect WIMPS is bringing about a crisis in physics. If not WIMPS, then What? VanDevender thinks “Quark Nuggets” are a possible answer. The two most common quarks are the Up quark (+2/3 fractional charge) and the Down quark (-1/3 fractional charge). The common charged proton consists of two Up quarks and one Down ($2/3+2/3-1/3=1$), while the uncharged neutron consists of one Up and two Down quarks ($2/3-1/3-1/3=0$). Ed Whitten proposed “quark nuggets” with equal numbers of Strange, Up, and Down quarks. Since Strange quarks have a charge of -1/3, these nuggets would be charge-neutral. Pace cited many researchers who have suggested quark-nuggets can be dark matter, and that this would be consistent with Standard Model. However, many are puzzled that single-mass particles, acting like little ball bearings, have not been found. Pace’s unconventional explanation is that just as the earth’s magnetic field makes it appear to be a bigger obstacle in the solar wind, quark nugget magnetic fields make them apparently larger.



Earth’s magnetosphere and atmosphere likely protect us from nuggets less than a gram in mass, Pace said. The ones that get through can have significant effects. Pace and colleagues are doing an experiment to measure quark nugget impacts at the Great Salt Lake, which has several advantages. With its large area, and lack of human-caused sounds, the Great Salt Lake can provide a dedicated observatory for acoustic signals. However, the salty environment is harsh for computers, which tend to conk out after just a few days. His team has measured some possible Events.

Pace estimated that quark nuggets might affect about 700 humans on the earth in a typical year. He suggested that some reports of meteor craters “with no detectable meteor” might be due to quark nugget impacts. He showed a news clip of a weird “explosion” at a Rhode Island beach that could have been caused by a 1-gram-sized quark nugget. A strange window shaking impact in Ireland, that left a crater with very smooth sides and no

ejecta, and which did not resemble IRA bomb craters, may have been due to a quark nugget a “couple of kilograms” in size, Pace said. He suggested that the mystery of TWA Flight 800 might be explained by an ionized channel (a “mini lightning stroke”) caused by a quark nugget.

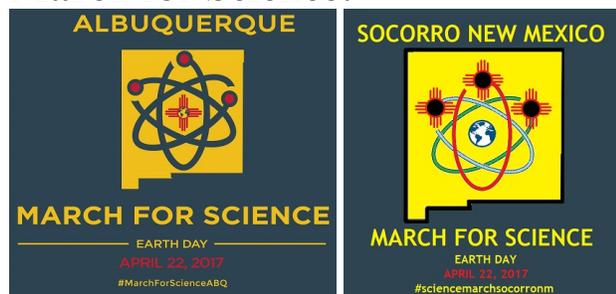
Pace asked for audience comments on whether he should publish results if they indeed come in, and was encouraged to do just that. Pace cautioned that it may be dicey, considering the many careers hanging on the WIMP hypothesis. A lively Q&A session concluded the meeting.



Was this crater in Ireland caused by a quark nugget?

NMSR thanks Pace VanDevender for a very interesting presentation.

April 12th Meeting: Prep for March for Science!



DUES - check the date on your mailing label. If it's time for you to renew, or to make a contribution, please send a check to NANCY SHELTON, NMSR Treasurer, 11617 Snowheights NE, Albuquerque, NM 87112

Name _____

Address _____

Membership \$20 per annum*

On the Net? Ask for the Paperless NMSR Reports! Send an email to nmsrdave@swcp.com "Dave Thomas"

*For Renewals that are above the \$20 annual amount, the excess will be applied to the NMSR budget. Thanks!

The NMSR e-mail list is fun! It's an e-mail list with news announcements of interest to NMSR members, discussions about news of the times, and more. To join, send a request to nmsrdave@swcp.com.

Thanks to: John Covan, Eddy Jacobs, Nancy Shelton, Debbie Thomas, and all our Puzzlers!

NMSR Reports Vol. 23, No. 3 March 2017
David E. Thomas, Editor (505) 410-0753
801 Fitch Ave, Socorro NM 87801

Dave Thomas
Creationism
Update
Weds. Mar 8, 7pm
CNM SRC
Room 204

IN THIS ISSUE:
Future Meetings
Announced
New Puzzles!
February Meeting:
Quark Nuggets
March for SCIENCE
April 22 (Earth Day)

