

# 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

### **FEBRUARY MEETING:**

NEW MEXICANS FOR SCIENCE AND REASON WILL HEAR J. Pace VanDevender, PhD

on "Detection of Quark-Nugget Candidate for Dark Matter"

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

==>R<sub>00m</sub> 204<== Bring a friend!

#### **FUTURE MEETINGS ANNOUNCED**

February 8<sup>th</sup>, 2017 NMSR Meeting: J. Pace VanDevender, PhD, on "Detection of quark-nugget candidate for dark matter."

Quark nuggets are also called strangelets, and nuclearites and are theoretical objects

composed of approximately equal numbers of up, down, and strange quarks. They have been proposed as a candidate for dark matter, which constitutes ~85% of the universe's mass. Its



nature has been a mystery for decades. Previous efforts to detect quark nuggets assumed that the

nuclear-density core interacts directly with the surrounding matter so the stopping power is minimal. In contrast, we find that the large magnetic field of quark nuggets will produce a magnetopause with surrounding plasma, as the earth's magnetic field produces a magnetopause with the solar wind, and substantially increases the stopping power. We use the magnetopause model to compute the energy deposition on air, water, and earth as a function of quark-nugget mass, discuss the consequences for previous work, and show initial data that indicate instrumenting the Great Salt Lake in Utah USA can test the quark-nugget hypothesis for dark matter with mass > 0.003 kg.

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

March 8<sup>th</sup>, 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.



#### **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

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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: X = G.

Bonus Puzzle Clue: Meditate on Inner Consonance.

#### 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**, **FEBRUARY 8<sup>th</sup>**, **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: FEBRUARY 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.

" B U P YPDI VCZPDWLO YPDI H S G BUP ABLVRG UHYP CSP BURSX R S MCEECS. BUPI GCS'B HOBPD BUPRD YRPZA ВС WRB BUP WHMBA. BUPI HOBPD BUP WHMBA ВС WRB BUPRD YRPZA." GD. (BCE KHNPD) ZUC

#### **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

#### JANUARY CYPHER SOLUTION

"IT MAKES THE ARK LOOK INCREDIBLY GAY." - CHRIS HARTMAN, ON KEN HAM'S SEASONAL "TAKE THE RAINBOW BACK" LIGHTS DISPLAY FOR THE ARK ENCOUNTER IN KENTUCKY.

Esteemed January Code Crackers: Mike Arms\*, Terry Lauritsen\*, Auston Moede\*. \*Secret Word: "GLUM SHOW BACKFIRED"

Need more Secret Word Cryptograms?

## SOCORRO STUMPER

New puzzles every week at www.nmsr.org/SocorroStumper.htm

# 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?

# January Bonus: "Keys to the Answer" Submitted by Dave Thomas

Consider the calculator at right. Assume that some non-zero number such as 1.0 has been placed into memory (MRC = memory recall). Now, consider the following sequence of calculator key strokes.





The January Bonus: if the sequence above is repeated *many* times, what is the eventual value of MRC, and how is that related to the first key in the sequence (7)?

**Solution: 2.6457513...** =  $\sqrt{7}$ . Congrats: Paul Braterman (UK), Rocky S. Stone (NM), Mike Arms (NM), Eric Hanczyc (WA).

January 11<sup>th</sup>, 2017 NMSR Meeting: *BIGFOOT*! Robert Kryder, CEO of Kryder Exploration LLC, on "Field studies and the UNM controversy regarding the study of an unrecognized, large bipedal omnivore in New Mexico, fact and fallacy."

Kryder began by describing his extensive exploration experience, familiarity with the outdoors, and interest in science and technology. He started investigating reports of novel, large creatures that people brought forth, including many from first responders and other trained observers. Rob says he and colleagues have found much evidence for a possible large hominid, including distinctive large vee-shaped tracks, broken tree limbs (up higher than

a man would reach), odors, sounds, direct sightings, copious skat samples, tufts of hair, and more:



Kryder contributed two samples to a major Bigfoot study by geneticist Bryan Sykes. No DNA could be recovered from the first sample, and the second was "not selected for analysis," even though it was a fresh sample with good provenance. Rob said,



however, that Sykes told the AP that all the samples had been tested. When the Sykes study was published, all samples described had mundane sources (bears, dogs, etc.)

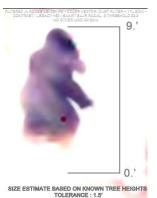
When another opportuniy

for testing came up through ISU's Jeff Meldrum, Meldrum ending up just sending it to Sykes, where it was not tested again, to Kryder's chagrin.



*Is the dark spot at the center Sasquatch?* 





Kryder discussed his theories on Sasquatch-their extreme shyness and intelligence, ability to forage on typical southwest plants, and so forth. He presented pictures (above) he was convinced show a Sasquatch in the field.

A lively Q&A Session followed the talk. Audience members suggested that the quality of evidence provided needed to be better – say, hi-res close-up videos rather than far-off grainy photographs. And, why haven't any sasquatch fossils ever been found? Of course, good DNA results would go a long way toward establishing the phenomenon.

But, what creature is leaving all this evidence? Richard Feynman's comment comes to mind: "In order to make progress, one must leave the door to the unknown ajar." However, one should also keep in mind the skeptics' motto, "Extraordinary claims require extraordinary evidence."

You can check out Kryder's evidence online, the KX Cryptid-Hominid Research Group at <a href="https://www.facebook.com/groups/KXCRYPTIDRESEARCHGROUP">www.facebook.com/groups/KXCRYPTIDRESEARCHGROUP</a>,

and Kryder Exploration at www.facebook.com/groups/KRYDEREXPLORATION.

NMSR thanks Rob Kryder for a very interesting presentation.

### Wintry Skeptiverse Haiku!

by Keith Thomas, Feb. 2017

In New Mexico,	Up on the rooftop,
Which sites are most often sought	Was that Bigfoot? Or Santa,
By E.T. seekers?	Caked with chimney soot?
Deniers must be In denial of their own Denialism.	Some people can't talk Of nuclear power without Having a meltdown.
Help! Unrecognized	Ever felt afraid
Biped omnivores took my	Of the first Friday after
Toroidal pastries!	Friday the 13th?

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, Albuq., 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, Keith Thomas, Debbie Thomas, and all our Puzzlers!

NMSR Reports Vol. 23, No. 2 February 2017 David E. Thomas, Editor (505) 410-0753 801 Fitch Ave, Socorro NM 87801 IN THIS ISSUE: Future Meetings VanDevender Announced **Quarks & Dark** New Puzzles! January Meeting: Matter Weds. Feb 8, 7pm Bigfoot CNM SRC Room 204 Wintry Haiku