

NMSR Reports

The Newsletter of the New Mexicans for Science and Reason

NMSR Reports, David E. Thomas, Editor, P.O. Box 1017, Peralta, NM 87042 © 2014

OCTOBER MEETING:

NEW MEXICANS FOR SCIENCE
AND REASON WILL SEE
BILL FIENNING demonstrate
"The Re-Animator"
AND DAVE THOMAS show
THE ORACLE OF BAT BOY
WEDS., OCT. 8th, 7 PM
==>MUSEUM OF NATURAL
HISTORY AND SCIENCE<==

==>1801 Mountain Road NW<==

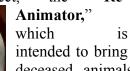
In the Multi-Purpose Room

Bring a friend

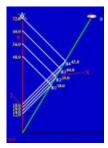
FUTURE MEETINGS ANNOUNCED

October 8th NMSR Meeting – an Evening of Magic, Relativity and Bat Boy!

At our October meeting, longtime NMSR member/dabbler in the black arts Bill Fienning will demonstrate his latest project, the "Re-



deceased animals back to life. Dave Thomas will reveal the **Oracle of Bat Boy**. Dave will also show how he is using the



Python computer language to generate animations for explaining the consequences of relativity, using the concepts of tracing light beams on simple space-time diagrams developed by Hermann Bondi. There may be a few other surprises, so don't

miss this meeting!

7 PM October 8th at the NM Museum of Natural History and Science. Info, John Covan, 268-1878.

NOVEMBER 12th Meeting

- Heat Death of the Universe

Mike Donohoe of Albuquerque will speak on "Could a 'Heat Death' Be Necessary for Life?" at our November 12th meeting.

Synopsis: "We are star stuff," but star stuff comes from dead stars, which contributes to the eventual heat death of the universe. Are the existence of Earth and life the heat death in progress?



YouTube 9/11 Truth Debate!



Dave Thomas is still collecting data for the upcoming closing response in the debate series. Quality debunking takes time!

Ben Radford on Book Tour

If you missed the September meeting, Ben will also do a book-signing on Saturday **October 25** at 1 PM at Barnes & Noble-Coronado (6600 Menaul Blvd. NE, Albuquerque).

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 the New Mexico Museum of Natural History and Science. NMSR Reports is its official newsletter.

NMSR officers:

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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.

• Robert Cormack

Professor of Psychology, NMIMT

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: A = B

Bonus Puzzle Clue: A diagram wll help.

WANTED: READER ARTICLES & COMMENTARY

Got something you want to share with NMSR members? Send it in! ATTN: Dave Thomas, Editor, NMSR printed up special jerseys with each of the four

REMEMBER, our next regular NMSR meeting is at 7 PM on WEDNESDAY, OCTOBER 8th, 2014, at the NM MUSEUM OF NATURAL HISTORY AND SCIENCE!

PUZZLE TIME!

[Please send solutions to Dave Thomas at: nmsrdave@swcp.com, or at P.O. Box 1017, Peralta NM 87042.1

Cyber-Cypher: OCTOBER 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.

"ZMG IBBT GDUOV EQRE ОМЕ NMFL, U LМ EQUOI SBROD UΕ NQRE ZMG EQUOI UE SBROD" UOUVM SMOEMZR, U O ΕQΒ AFULB

TFUOHBDD

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

SEPTEMBER CYPHER SOLUTION

"A MATHEMATICIAN MAY SAY ANYTHING HE PLEASES, BUT A PHYSICIST MUST BE AT LEAST PARTIALLY SANE." -- JOSIAH WILLARD

Esteemed September Code Crackers: Mike Arms*, Terry Lauritsen*, Alice Anderson*. *Secret Word: "GROUNDABLE PITH"

October Bonus: "Who got my jersey?"

Submitted by Dave Thomas

James Randi, Michael Shermer, Richard Dawkins, and Neil deGrasse Tyson were all entered in a charity volleyball game. The sponsors men's names. When Randi mischievously suggested that everyone wear another's jersey, all agreed with his marvelous prank.

The October Bonus: From the following information, deduce who was wearing each jersey:

- belonged to Shermer.
- Dawkins didn't wear Randi's jersey, nor vice versa.
- Neil deGrasse Tyson got to serve ahead of the person wearing Randi's jersey.

September Bonus: "Faster than g?"

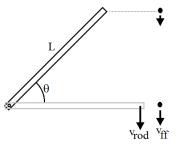
Submitted by Dave Thomas

A hinged rod of length L is held at rest at an angle θ , and then released. At precisely the same moment, a steel ball is released from the same height as the top of the rod.

The September Bonus: If v_{rod} is the speed of the *tip* of the rod as it hits the flat table top, and $v_{\rm ff}$ is the speed of the free-falling steel ball as it impacts the same table top, what is the ratio of v_{rod} to v_{ff}?

Solution: The ratio is $\sqrt{(3/2)} \cong 1.2247...$ Yes, the tip of the rod accelerates even more than freefall -"Faster than g"!

Congrats to our September Solvers: Keith Gilbert (NM), Eric Hanczyc (WA), Eiichi Fukushima (NM).



September 10th, 2014 NMSR Meeting: Benjamin Radford on "The Loretto Staircase"

For the September meeting, Ben Radford talked about the mystery of Santa Fe's Loretto Staircase, and also about his new book, Mysterious New Mexico: Miracles, Magic, and Monsters in the Land of Enchantment.





Radford said that "Santa Fe's Our Lady of Light Chapel, better known as the Loretto Chapel, contains a mystery known around the world. Inside the ornate vet unassuming exterior lies what many consider a miracle. It is called St. Joseph's Stairs, or simply the Miracle Staircase,

Randi wasn't wearing the jersey that and what makes it so special is that the spiral staircase makes two complete turns from the floor to the choir loftwithout a single nail, or even a center pole for support."

> Ben continued, saying that the origin story of the staircase goes back to the 1800s. "Mother Magdalen called in many carpenters to try to build the stairway; but each, in his turn, measured and thought and then shook his head sadly saying, 'It can't be done, Mother.' Instead of giving up, the Sisters of Loretto prayed for nine days to St. Joseph, and "On the last day of the novena, a

gray-haired man came up to the convent with a donkey and a tool chest. Approaching Mother Magdalen he asked if he might try to help the Sisters by building a stairway! Mother gave her consent gladly and he set to work.... The only tools he had were a hammer, a saw, and a T square. When Mother Magdalen went to pay him, he had vanished."



Nowadays, the mystery includes these claims:

- Unknown carpenter who appears following prayers with impossibly simple tools—possibly St. Joseph?
- Unknown type of wood
- Unique, made without the use of nails or center support
- · Some say it was constructed from the top down, overnight!



The original staircase had no railing!

Radford then proceeded to dismantle the claims Rocks of Death Valley has finally been solved. about the staircase. In addition to the staircase being made of strong wood (probably from France) with expansionresistant wood pegs, it contained lots of glue and a metal brace. But the key thing Radford found in the history books by Keith Thomas was that the stair maker was not a mysterious figure, but a real artisan named Francois-Jean Rochas. A Santa Fe historian named Mary Jean Cook tracked down the real story years ago. It is quietly ignored by the staircase promotion team, whose members continue to pimp the "mystery." Clinching the case, Rochas was called the stairway builder by his friend Quintus Monier, contractor of the St. Francis Cathedral in Santa Fe, who also worked on the chapel. Cook discovered an obituary notice in the Santa Fe New Mexican newspaper on January 5, 1895, written by Monier which stated that "Frank Rochas...a Frenchman, was favorably known in Santa Fe as an expert worker in wood. He built the handsome staircase in the Loretto Chapel." Rochas had dozens of tools, not just a few, and was considered a masterful craftsman.

NMSR thanks Ben Radford for an intriguing presentation.



John Geohegan kicked off the September meeting with a rousing discussion of how the case of the strange Moving

MORE SKEPTIVERSE HAIKU For the Autumn Equinox

The fabled tortoise	At the Natural
Was lucky his race took place	Health Spa, some clients look like
On a bad hare day.	They've had some work done.
-	
Lab links Bigfoot furs	Naturopathic
To cows and bears. Will they find	Veterinarians know
Some synthetic hairs?	How to heel their dogs.
-	_
At a Greek wedding,	Would the Great Wizard
A spectacular display	Be proud of Doctor Oz's
Of plate tectonics!	Promotional tricks?

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				
Address Membership \$20 per annum				
Membership \$20 per annum				
Membership \$20 per annum On the Net? Ask for the Paperless NMSR Reports!				

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

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P.O. Box 1017, Peralta, NM 87042-1017		
OCTOPED	IN THIS ISSUE:	
OCTOBER	Future Meetings	
MEETING	Announced	
The RE-ANIMATOR	Puzzles	
plus BAT BOY		
7 PM	September Meeting	
/1 W1	Loretto Staircase	
	More Skeptiverse Haiku	