



NMSR Reports

The Newsletter of the
New Mexicans for Science and Reason

NMSR Reports, David E. Thomas, Editor, 1201 N. Avenida de Chamiso Pl., Socorro, NM 87801 © 2021

DECEMBER MEETING:

NEW MEXICANS FOR SCIENCE
AND REASON will hear

**Dr. Barbara Forrest on
"Thoughts on Kitzmiller 15
Years On"**

=>January 13th, 2021 7:00PM<=

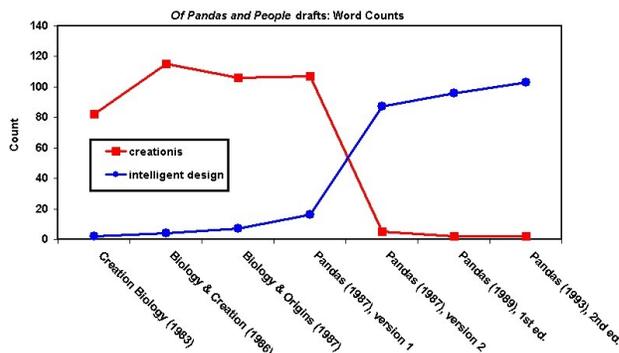
=>Attend online!<=

FUTURE MEETINGS ANNOUNCED!

January 13th, 2021 NMSR Meeting: Dr. Barbara Forrest on "Thoughts on Kitzmiller 15 Years On"

Dr. Barbara Forrest is a Professor of Philosophy at Southeastern Louisiana University. She co-wrote *Creationism's Trojan Horse: The Wedge of Intelligent Design* (Oxford University Press 2004) with Dr. Paul Gross. Barbara was a key witness in *Kitzmiller v.*

Dover Area School District, the 2005 court case in which "Intelligent Design" was soundly defeated (December 20th, 2005). The Thomas More Law Center filed a motion to have her excluded as an expert witness, but Judge John E. Jones III denied the desperate ploy. NMSR is delighted to host Dr. Forrest on this historic anniversary.



"Cdesign Proponentsists": the Transitional Form that proved 'Intelligent Design' evolved directly from 'Scientific Creationism

Because of the ongoing Corona virus crisis, this meeting will be held online, and members can attend from their homes or offices. It will be hosted on Zoom. A Zoom Link will be sent out to all members and potential attendees before the meeting. To get added to the attendee list, simply email nmsrdave@swcp.com.

Tune in at **7:00 PM January 13th, 2020**, On Line!

February 10th, 2021 NMSR Meeting: Mario Cruz on "AI Persuasive Technology and Social Media: A moral dilemma?"

Social Media platforms (e.g., Facebook, Instagram, What's App, LinkedIn, etc.) have become a core feature of today's global society. Yet, there are mixed signals as to the societal benefit these commercial entities provide.

We will discuss the impact (both good and bad) of Social Media platforms on the future of mankind. We will also have a more granular discussion about social media technology and business models asking the question do capitalist free market principles applied to social technologies optimize the benefits of social media platforms? 7PM Weds. Feb. 10th 2021, Zoom.



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**

1201 Avenida de Chamiso Pl., Socorro, NM 87801
nmsrdave@swcp.com

John Covan, Vice-President

jmcovan@juno.com

Debbie Thomas, Treasurer

3205 Alcazar NE, Albuq., NM 87110
abqdebbie@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

Membership: **\$25/year** (hardcopy newsletter), or **\$15/year** (downloadable PDF), make your check **payable to NMSR**, send to treasurer (Debbie Thomas).

NMSR Advisors:

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

Cyber-Cypher Clue: Z = Y.

Bonus Puzzle Clue: Find the total time for upstream and downstream legs.

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 **ONLINE, Jan. 13th at 7PM!**

Zoom Meeting info will be emailed out, ask nmsrdave@swcp.com for a copy.

PUZZLE TIME!

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

Cyber-Cypher: JANUARY PUZZLE

(Submitted by Dave Thomas, quote courtesy Mike Arms)

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 K P J L S I K X H C W P E
H L R K I Q M D L R P L J S V Q E P K L E K
D M S H I X K I P W . " - K H J K L P K
E W D I F , M Y K ' Q Y D I F W D R Z ' ,
O Y S Q Y S O K R M Y K P T X S I M D L E K
S V Q Y D I F Q P L T D I P L K V S S R
E Y D P L Q .

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

DECEMBER CYPHER SOLUTION

"THERE IS NO WEEK NOR DAY NOR HOUR WHEN TYRANNY MAY NOT ENTER UPON THIS COUNTRY, IF THE PEOPLE LOSE THEIR ROUGHNESS AND SPIRIT OF DEFIANCE." - WALT WHITMAN

Esteemed December Code Crackers: Mike Arms*, Terry Lauritsen*, and Austin Moede*!

*Secret Word: "FISHY COUP ALERT"

SOCORRO STUMPER**Need more Secret Word Cryptograms?**

New puzzles every week at

www.nmsr.org/SocorroStumper.htm



January Bonus: “Rollin’ on the River”

Submitted by Dave Thomas



A rowing enthusiast can propel a boat at 4km/hr in still water. The rower takes the boat 7 km upstream, and then 7 km downstream, returning to the starting point after 8 wearying hours.

The January Bonus: How fast is the stream flowing?

December Bonus Solution: “A π and 5 Surprise”

Courtesy Ben Sparks / Numberphile

Consider a small number x that is 1 over n 5s; for example, if $n = 3$, the number x is $1/555$.

The December Bonus: Show that the sine of x , evaluated in *degrees*, is approximately $\sin_d(x) = \pi / 10^{2+n}$.

Extra Bonus: Show that the result becomes more accurate as n is increased:

$$[10^{2+n} \sin_d(x) - \pi] \rightarrow \pi / 10^n.$$

Answer: For $n = 3$, $1/555 \cong 0.00180180180\dots \cong 180/10^5 \times 1.001001001\dots = 180/10^5 \times (1+a+a^2+a^3+a^4\dots)$, [where $a = 0.001$] $\cong 180/10^5 \times 1/(1-a)$. Since $\sin(\theta) \cong \theta$ (for θ in radians), and $\text{degrees} = 180 * \text{radians} / \pi$, then $\sin_{\text{deg}}(\theta) = \theta * \pi / 180$.

Thus, $\sin_{\text{deg}}(1/555) \cong 180/10^5 \times 1/0.999 * \pi/180 \cong \pi / 10^{2+3}$

For n 5's, the sine of the angle approaches $\pi / 10^{2+n}$.

Congrats: Earl Dombroski (NM)!

December 9th, 2020 NMSR Meeting: Ben Radford on his new book, “Big - If True: Adventures in Oddity.”

Our December speaker was Ben Radford, a freelance science writer at Discovery News, and a Research Fellow and investigator at the Committee for Skeptical Inquiry. Ben discussed his new book, “**Big - If True: Adventures in Oddity.**”

The book is a collection of Skeptical Inquirer magazine articles by Radford, a local

folklorist and paranormal researcher.

Ben has been writing for Skeptical Inquirer for a couple of decades. He didn’t really have a ‘niche’ (Robert Sheaffer writes about UFOs, Harriet Hall about medicine, etc.), so he decided to write a Q&A column. He waited for people to ask questions, and they obliged him. He wanted to bridge the gap between the skeptical community and the general public. The topics were often “BIG – if true!” For example, if psychics really could solve crimes, that would



be really big news – right? The topics turned out to be fascinating, weird, crazy, and often deserving of investigation. Recently, Ben had to decide which of hundreds of columns he should include in the new book. All told, 70 columns were chosen.

Sometimes the questions were from genuinely troubled people who believed they’d seen a ghost, or been hexed by a witch. Some of the questions were from trolls or troublemakers, but Ben said he usually could tell if the writers were sincere. He wanted to help them, but without bolstering any harmful or dangerous beliefs.

The first entry in the book involves a woman who thought she had been cursed. She had been having fights with her family, and went to see 8 to 10 psychics for advice. They all had told her that some enemy must have cursed her. Many people want to believe psychics, but their trust can be too easily manipulated by the so-called seers. He first emailed Chelsea to say “You did the right thing about reaching out to me. I am an expert in these sort of things,” to gain her confidence, and to be able to help her. Why should she bother to listen if he’d said “I don’t really know anything about curses”?

He tried to be respectful and diplomatic,

while trying to steer his correspondent to using critical thinking, and avoiding magical thinking. He advised Chelsea to stop going to psychics, because she'd visited a dozen, and was *still* "cursed," frightened, and having trouble sleeping. Whether or not the psychics are real, he said, it's clear they were not helping her. He did not try to close the door on all of her magical thinking, because that would have ended the conversation prematurely. He did talk to her about confirmation bias, and how she was seeing patterns in the occurrences of "bad" things that weren't really there. If you believe something bad happens at noon, then you will be anxious and apprehensive every morning, and bad things will come along to oblige. He told her not to worry about the events, and that the tension would ease over time. Chelsea responded that the advice helped.



Ben mentioned his podcast, "Squaring the Strange," and its upcoming episode with Leo Igwe, a Nigerian human rights advocate who works on behalf of children falsely accused of witchcraft.

Many times, his answers encouraging critical thinking and science-based reasoning are

not received well, and he sometimes reads angry letters on the podcast.

Another topic in the new book involves the question "Is eharmony scientific?" Ben was assured there was evidence, and received a long email from the company, with many attachments. It turned out to be mostly boiler plate ads from the website. The few technical articles provided little or no information, beyond the rather obvious "The more things people have in common, the more likely they're compatible." His correspondence with eharmony became acrimonious. A couple of years later, the company was found to use false advertising in the British courts.

He mentioned several more topics: elves and malicious fairies disrupting construction in Iceland; hypnotist thieves; health claims, chupacabra, subliminal advertising, and more. NMSR thanks Ben Radford for an entertaining discussion.

Videos of past meetings are available at <http://www.nmsr.org/meetings.htm>.

DUES check the date on your mailing label. If it's time for you to renew, or to make a contribution, please make your check **payable to NMSR**, and send it to Debbie Thomas, NMSR Treasurer, 3205 Alcazar NE, Albuquerque., NM 87110
 Name _____
 Address _____
Membership \$25 per annum (hard copy newsletter), or \$15 per annum (online newsletter).

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, Debbie Thomas, and al our Puzzlers!

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 David E. Thomas, Editor (505) 410-0753
 1201 Avenida de Chamisso Pl. Socorro NM 87801

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