



# 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

**MARCH MEETING:**  
**NEW MEXICANS FOR SCIENCE**  
**AND REASON will hear**  
**Jim Kirkland**  
 on “Feathering Utahraptor:  
 History of Dromaeosaur Discoveries”  
 =>March 10<sup>th</sup>, 2021 7:00PM<=  
 =>Attend online!<=

## FUTURE MEETINGS ANNOUNCED!

March 10<sup>th</sup>, 2021 NMSR Meeting: **Dr. Jim Kirkland** on “Feathering Utahraptor: History of Dromaeosaur Discoveries”



Jim Kirkland, an alumnus of New Mexico Tech, is State Paleontologist of Utah, and works at the Utah Geological Survey. *“It is my job to make sure that Utah's fabulous fossil record is protected and used for learning about the history of life, education, and the wonder of it all. I also promote Utah's fossil record for tourism and as a natural laboratory for all our nation's scientists and universities. Basically, I'm Utah's paleo-cheerleader and I get to work on a wide variety of projects.”* Jim will be

talking about the history of dromaeosaurs, and the magnificent Utahraptor specimen he is curating.



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](mailto:nmsrdave@swcp.com).

Tune in to Zoom at **7:00 PM March 10<sup>th</sup>, 2021**, On Line!

**April 14<sup>th</sup>, 2021 NMSR Meeting: TBD**



**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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**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:** Clue? Not this time. ;)

**Bonus Puzzle Clue:** You probably need some algebra.

**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, March 10<sup>th</sup> at 7PM, on Zoom!**

**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.

" M L F    L F C B M L    V X    C D F I J A C W N  
 D Y N M    W V    B V W K F I    U F    C  
 A V D D V G J M Z    M V    U F    M I C G F G ,  
 U V Y K L M ,    V I    N V B G    X V I  
 E I V X J M    U Z    M L F    J W N Y I C W A F  
 C W G    E L C I D C A F Y M J A C B  
 J W G Y N M I J F N . "    -    G F U I C  
 L C C B C W G

**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**

"SCIENCE IS NOT ONLY A DISCIPLE OF REASON BUT ALSO ONE OF ROMANCE AND PASSION." - STEPHEN HAWKING

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

\*Secret Word: "CLASPING THEORY"

**SOCORRO STUMPER**

**Need more Secret Word Cryptograms?**

New puzzles every week at [www.nmsr.org/SocorroStumper.htm](http://www.nmsr.org/SocorroStumper.htm)



**March Bonus: “Roll Up Your Sleeve”**

*Submitted by Dave Thomas*

Three nurses, Kim, Frank and Mary, can together administer three times the number of vaccines per hour as Mary alone, and four times the number of vaccines as Frank alone.

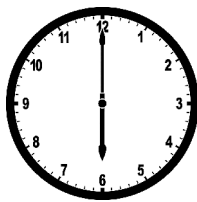


**The March Bonus:** If the slowest nurse can perform six vaccines per hour, how many people can the team of three nurses inoculate in one hour?

**February Bonus: “Arms Spread Wide”**

*Submitted by Dave Thomas*

At 6:00 AM and 6:00 PM, a clock’s hour and minute hands are exactly 180 degrees apart.



**The February Bonus:** How many times does this opposition occur in a single day? What are those times?

**Answer:** 22: 00:32:44, 01:38:11, 02:43:38, 03:49:06, 04:54:32, 06:00:00, 07:05:27, 08:10:55, 09:16:22, 10:21:49, 11:27:16, 12:32:44, ...

**Congrats:** Earl Dombroski (NM), Gene Aronson (NM), Terry Lauritsen (NM), and Rocky S. Stone (NM)!

**February 10<sup>th</sup>, 2021 NMSR Meeting: Dr. Mario Cruz on “AI Persuasive Technology and Social Media: A moral dilemma?”**

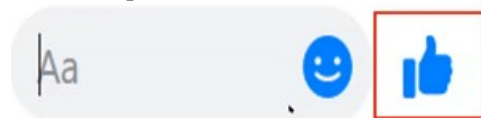
Dr. Cruz introduced himself as a clinical professor of psychiatry at the University of New Mexico’s Heath Sciences Center. He is also associate chief medical information officer for the UNM Health System, and the medical director of health information management (once called “medical records”). He has been a psychiatrist for over thirty years, and worked at the University of Arizona and the University of Pittsburgh before coming to New Mexico.

Mario said he wanted to start a discussion on “artificial intelligence,” which is really software-driven statistical analyses used for decision analysis,

persuasive technology and social media. Have we placed ourselves in a moral dilemma? Mario quoted B. J. Fogg as saying “Computers are powerful persuaders because they represent in the public opinion a kind of mathematical precision that may serve as a role model of ‘true and accurate’ feedback.” (2003).



Why do people believe what they see on Facebook, Twitter and other social media as Truth? How many companies and government organizations have faith that machine learning and artificial intelligence will provide the best-fitted models for decision making? Fogg, a Stanford University pioneer of the study of persuasive technology, showed that computer devices (including phones, exercisers, video games and much more) can bring about changes in behavior, attitude, motivation, worldview, and compliance. Behavior is the intersection of motivation, the abilities of the individual to act, and the prompts that drive that action. Who knew that a smiley face or a thumbs up could be such a powerful driver of behavior?



There are two recognized forms of persuasive technology: a conscious awareness form (“persuasive technology”, supraliminal) and an unconscious form (“ambient persuasive technology”, subliminal). Getting thumbs up messages can reinforce beliefs, whether or not those beliefs are

valid. Persuasive technologies can promote good (for example, health or conservation interventions, like the “you’re wasting fuel” indicators in newer cars), but also can promote inequities regarding criminal justice, housing, and the spread of disinformation. The latter can be propagated widely by advertising algorithms. Cruz quoted Howard Rheingold: “Attention is a limited resource, so pay attention to *where* you pay attention.” Mario said it was important for society to exercise more control over persuasive forms of technology.

A free-wheeling discussion ensued. Mario said there needs to be a balance between capitalist economics and social economics. He said some people are much more responsive to social media prompts, and that public education has largely failed to teach critical thinking, which enables people to resist social manipulation. Fear can be a major motivator, and is used by many manipulators, including politicians. Dave Thomas mentioned the proliferation of social media “echo chambers” as a cause of concern. Mario said improving education of critical thinking was the crucial concern, so more people can learn to question what they see and hear online, rather than accepting it as true because it’s “coming from a computer.” Glenn Kuswa talked about religious education as an echo chamber, and Sylvia Ramos asked about governmental concerns about these issues. Mario said there needs to be more regulation



of persuasive technologies.

Gerry Alldredge and John Covan noted they don’t have personal experience with some of these issues. John said “I don’t do YouBook and I don’t do FaceTube.”



NMSR thanks Mario Cruz for a thought-provoking discussion.

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

### March Skeptiverse Haiku! by Keith Thomas

COVID protection: Should a chupacabra wear A cubreboca?	If Texans secede, New Mexicans must manage Two foreign borders!
Can 5G wireless Be re-engineered to stop COVID-19’s spread?	Oumuamua – Great name for an alien Cattle probe space ship!
Ex QAnonners, You could call your support group Qanon-anon.	Which New Agers knew Their Age of Aquarius Would begin like this?

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](mailto:nmsrdave@swcp.com).**

Thanks to: John Covan, Eddy Jacobs, Debbie Thomas, Keith Thomas and all of our Puzzlers!


**NMSR Reports Vol. 27, No. 3, March 2021**  
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**IN THIS ISSUE:**  
 Future Meetings Announced  
 New Puzzles!  
 February Meeting: Mario Cruz on Social Media and Persuasive Technology

**Jim Kirkland**  
**Dromaeosaurs!**  
**Weds 10<sup>th</sup> 7PM**  
**Online/Zoom**