On April 1 of 1998, NMSR Reports included an article by April Holiday entitled “Alabama Legislature Lays Siege to π”.

HUNTSVILLE, Ala. -- NASA engineers and mathematicians in this high-tech city are stunned and infuriated after the Alabama state legislature narrowly passed a law yesterday [March 30, 1998] redefining pi, a mathematical constant used in the aerospace industry. The bill to change the value of pi to exactly three was introduced without fanfare by Leonard Lee Lawson (R, Crossville), and rapidly gained support after a letter-writing campaign by members of the Solomon Society, a traditional values group. Governor Guy Hunt says he will sign it into law on Wednesday.

The article was cross-posted on the Talk.Origins Usenet bulletin board by Dave Thomas, and was followed later that day by a confession that it was actually a parody based on Creationism in New Mexico, written by Sandia physicist Mark Boslough. By then it was too late, however; the article had gone viral, and the legislature of Alabama started to receive inquiries from the press about the change to π.

Join Mark Boslough as he talks about the award-winning parody and its ramifications. The April meeting will include a viewing of the most recent public appearance of the prank, on the April 1st, 2021 edition of Jeopardy!

https://www.youtube.com/watch?v=AgFSv3kI6_4

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 to Zoom at 7:00 PM April 14th, 2021, On Line!

May 12th, 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.

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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: Y = F, Z = K

Bonus Puzzle Clue: What is the formula?

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, April 14th 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: APRIL 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.

"PY PRLI'Q HGCZ HPQS MGB, P HPKK HGCZ LGCBIF MGB. " - LIIPD DLKDM, RGOJBDQC ARPDIQPAQ, OLSQDLORPRLI, LIF IAL CDRZDQ ARPDIQPAQ

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!

ABCDFGHIJKLMNOPQRSTUVWXYZ

MARCH CYPFHER SOLUTION

"THE HEALTH OF AMERICANS MUST NO LONGER BE A COMMODITY TO BE TRADED, BOUGHT, OR SOLD FOR PROFIT BY THE INSURANCE AND PHARMACEUTICAL INDUSTRIES." - DEBRA HAALAND

Esteemed March Code Crackers: Mike Arms*, David Kinder*, Terry Lauritsen*, and Austin Moede*!

*Secret Word: "CLAMPED RIGHTS"

SOCORRO STUMPER

Need more Secret Word Cryptograms?

New puzzles every week at www.nmsr.org/SocorroStumper.htm
April Bonus: “Herd Immunity”  
*Submitted by Dave Thomas*

If a new disease-causing virus comes along with a “spread factor” $R_0$ of one new infection per infected individual, a possible pandemic will fizzle out, with no need for mass vaccination. For $R_0 = 10$ new infections per each infected person, however, about 90% of the population will need to be vaccinated to prevent a new pandemic.

**The April Bonus**: If the novel coronavirus of 2019 has an $R_0$ of 3, what percent of the population should be vaccinated to prevent a new pandemic?

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?

**Answer**: Frank can do 6 shots per hour, Mary can do 8, and Kim can do 10. All together, they can do 24 per hour.

**Congrats**: Earl Dombroski (NM), Keith Gilbert (NM), Mike Arms (NM), Paul Braterman (UK), Gene Aronson (NM), Allen Robnett (NM), Terry Lauritsen (NM), and Harold H. Gaines (KS)!

March 10th, 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. He did his masters at Northern Arizona, and Ph.D. at the University of Colorado. His discovery of Utahraptor is what got him the job as the third state paleontologist of Utah.

Jim met the first Utah state paleontologist, Jim Madsen, while digging for dinosaur bones in the San Juan region with Dave Thomas and his father (also Dave). The first dromaeosaurus ever found (specimen #1) was *dromaeosaurus albertensis*, found by Barnum Brown and W. D. Mathew in the Dinosaur Provincial Park area (Alberta, Canada) in 1914. During the 1920s, Roy Chapman Andrews led an expedition to Mongolia for the American Museum of Natural History (AMNH). In 1924, H. F. Osborn discovered the first “raptor”, *Velociraptor mongoliensis* in 1924 (specimen #2). In this animal and other raptors, the pubis bone is pulled back, rather than going forward like most other dinosaurs. Portions of the tail vertebrae extend and wrap around each other to make the end of the tail stiff and rigid, for balance. The large claw on each foot is normally carried upright, so as to keep the claws sharp when not being use to stab at or hold prey down.

In the Polish Mongolian expeditions of the 1960s led by Zofia Kielan-Jaworoska and described by Halszka Osmolska, an amazing specimen of a protoceratops in battle with a velociraptor was found. Their scuffle set off a sand avalanche, which buried them both alive. *Dromaeosaurus* was redescribed to include the velociraptors in 1969 by Edwin H. Colbert. It was at this time that a third archetype, *Deinonychus antirrhopus* (“Terrible Claw”) was described by John Ostrom of Yale, working in the lower Cretaceous of Montana. Deinonychus was an energetic and sophisticated animal, not a sluggish cold-blooded dead end, and helped spur the “warm-blooded dinosaur” revolution popularized by Bob Bakker. John Ostrom pointed out that Deinonychus was related to *birds*.

An interesting fossil Jim found in a Moab rock shop in 1990 started Jim working with the shop owner, Rob Gaston. The discovery was early-Cretaceous armored dinosaur, which Jim named *Gastonia Burgei*. (Don Burge also contributed.)
More work in the “Gaston Quarry” revealed a velociraptor-like claw that was twice as big as any ever seen. This led to more bones, culminating in the 1993 announcement of the 6th velociraptor find, *Utahraptor ostrommaysorum*. Coming out just before the release of the first Jurassic Park movie, Utahraptor was just the right size for the raptors featured in the movie, which Michael Crichton had based on Deinonychus. The press release of Utahraptor was unfortunately buried by another major news event, the start of the Desert Storm war. Eight more Utahraptors were found in the Dalton Wells quarry north of Moab.

Jim went on to describe many interesting facets of dinosaur history, feathered raptors, and paleontology. NMSR thanks Jim Kirkland for a fascinating discussion.

Videos of past meetings are available at [http://www.nmsr.org/meetings.htm](http://www.nmsr.org/meetings.htm).

### April Skeptiverse Haiku!

by Keith Thomas

| The late, great Randi          | COVID precautions        |
| Urged us to/Fight the forces   | Have radically reduced    |
| Of flim-flam and woo           | Influenza rates!          |
| Can Trump prophets see         | Support your local        |
| Their trumpian prophecy’s      | Antidisinformation        |
| Inaccuracies?                  | Organization!             |
| To mine one bitcoin,           | Haiku can help you        |
| One just might/Need to process | Epigrammaticalize         |
| A bazillion bytes.             | Your skeptical thoughts.  |

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 Aczar 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, Keith Thomas and all of our Puzzlers!