

STEM Society Meeting, February 12, 2013

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1 About the STEM Society and the STEM Society Website

STEM is an abbreviation for Science, Technology, Engineering and Mathematics. The acronym STEM is commonly associated with K-12 education,

but our use of the term is not restricted to this meaning. There are nearly 100 people on the mailing list, although a much smaller group attends any one meeting. We meet on the second Tuesday of each month at the Trailside Center at 99th and Holmes in Kansas City, Missouri. The meetings are open to all. The start time is 6PM. We make presentations, have discussions, and have demonstration experiments. These relate to Science, the History of Science, Mathematics, Engineering, Philosophy and Technology at all levels. The topics have ranged from a technical discussion of the mathematics of General Relativity to scientific experiments for young students.

The set of meeting notes may be viewed by going down the list of notes appearing on the front page of the site. These notes contains links to documents, which may be viewed or downloaded by clicking the link. Other documents can be reached by clicking the heading "Documents and Downloads" that appears on the left side of the front page. Then click on "documents." The meeting notes may also be viewed in an archive file in the list of documents. Most of the documents are PDF files. They may be viewed or downloaded to the computer by clicking, provided Adobe Reader is present, or another program capable of reading PDF files. There are usually more documents available at the site than are listed under "Documents" because they are not in the documents.htm file.

The web site is:

<http://www.stem2.org/>

Direct to the documents list:

<http://www.stem2.org/je/documents.htm>

Direct to the archive file:

<http://www.stem2.org/je/archive.pdf>

2 The February Meeting Announcement

The February meeting of the STEM Society will take place on the second Tuesday of the month, February 12, 2013, at the Trailside Center at 99th and Holmes in Kansas City, Missouri. The starting time is 6PM.

A List of Possible Topics:

- (1) Electronics and Circuits.
- (2) Information on machine building projects.
- (3) Report on the instruments project to measure atmospheric temperature variation with height.
- (4) Proteins and Biochemistry
- (5) Problems and Solutions. Problems in Mathematics and Engineering
- (6) Book Reports.
- (7) Scientific Biographies.
- (8) Impromptu topics from the masses who gather for this meeting.

The STEM Society Website:

<http://www.stem2.org/>

3 Review of Last Months Notes

4 Probability: Birthdays

See the **Birthdays** subsection in the following document.

<http://www.stem2.org/je/probabilitytheory.pdf>

5 Calculus Review: Length of a Spiral

See the following document

<http://www.stem2.org/je/spiral.pdf>

6 Mersenne Primes, Largest Known Prime Number

Curtis Cooper 48th Mersenne prime, January 2013.

7 Machine Projects

3d Printer, CNC Router, Laser Cutter.

8 Cécile Lagrandé: Data Logger, Atmospheric Measurements

Graphs of simultaneous data. Feaster.

9 Bill Reid: Falcon Behavior

Falcon and pigeon friend.

10 Kent Smith: Electronics

Devices to attach to falcon.