

The **B E E E T**

The Bulletin of Electrical & Electronics Engineers of Tucson

IEEE TUCSON SECTION AND JOINT CHAPTER MEETING

ELECTROMAGNETIC CROSSTALK

Date: Monday, November 1, 2004

Time: 6:00 P.M.

Speaker: Mike Lassise, Raytheon

Place: ECE512 at the U of A

With components working faster and power levels dropping, circuit interference is becoming more evident. One of the leading interference culprits is crosstalk — a phenomenon where the noise of one trace or cable line travels to another without any direct connection.

The seminar will consist of a free-wheeling interactive presentation that covers crosstalk concepts, as well as applicable solutions to crosstalk problems. Some of the specific topics covered will include:

- What causes crosstalk?
- How is it generated in one trace?
- What is its impact on power?
- How does it couple onto other traces?
- What is its impact on circuitry, return planes and the ground scheme?
- How can engineers identify crosstalk and resolve the problem on existing designs?
- What are some design tips and rules to minimize the problem?

This seminar will be of interest to all electronic designers, particularly of RF and digital systems.

Mike Lassise has been active in the fields of electromagnetic effects and electromagnetic interference for more than 25 years. During this time, he has worked on many programs that involved electromagnetic effects of ships, aircraft and satellites. He also teaches classes on electromagnetic interference and radiation hardness. Currently, he is the technical manager of the E3 group in the Radar and RF Design Center at Raytheon in Tucson. Mike Lassise earned Master of Science degrees in physics and in mathematics from the University of Montana in 1975 and 1976, respectively.

Conferences Coming to Tucson

The 42nd Annual Applied Reliability Engineering and Management Institute Conference will be held November 15-18, 2004 at the Doubletree Hotel at Reid Park. For information, email: dimitri@u.arizona.edu or check out the website at <http://www.u.arizona.edu/~dimitri/Seminar.htm>

The 2005 IEEE International Conference on Networking, Sensing and Control will be held March 19-22, 2005 in Tucson. For more information, check the website at: <http://www.ieeeicnsc.org/>

Feedback and Volunteering

We need to hear from you! We want to know what we can provide to make IEEE a better organization. If you have any ideas for meetings, any activities that promote engineering and the IEEE, let us know! We'd like to hear from you. Also, remember that we run this as a set of volunteers. If you put something into this organization, you can get much more out of it! We need you to help out! Contact us! Help out! Contact us!

New SSC Chapter Forming

A new Solid State Circuits Chapter is forming in the Tucson Section! If you are a member of the SSC, or are just interested in the field, consider becoming active. We're still in the process of getting established and are looking for participants and speakers. If you want to do more with the chapter contact Joseph Wu at joewu@ieee.org or at 519-0904.

Elections Coming for the Next Year

Get involved with IEEE in Tucson! The Tucson Section will soon have elections for officers for the coming year and the best way to get involved is to become an officer! If you want to see more than just the mailers and magazines, help us help you get it.

The Tucson Section also has standing committees whose chairperson is not elected, but is appointed by the Section Chairman. If you are interested in any of these positions or are interested in having a say in what the Tucson Section does, please notify Joseph Wu at joewu@ieee.org or at 519-0904.

Senior Membership

Do you want to become a senior member of the IEEE? The IEEE wants to promote qualified candidates to senior membership! If you have 10 years of professional experience of which five years of significant professional performance, you are qualified for a senior member upgrade. Educational experience such as a bachelor's degree in an IEEE-designated field counts 4 years to that number, a master's degree counts 5 years and a doctorate counts 6 years. In order to find out more, point your web browser to www.ieee.org and search for senior membership!

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In case you didn't know, you can get email notices about meetings in the Tucson Section. Just check out the page in the Tucson Section Website: <http://www.ewh.ieee.org/r6/tucson/mail.htm>. Also, if you want to change addresses, change a typographical error in your profile, or have problems with your subscriptions, you can do solve those problems yourself! Send an email to one of the addresses listed below:

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Tucson Section Questions

joewu@ieee.org or 519-0904

Website:

<http://ewh.ieee.org/r6/tucson>

**Tucson Section Meeting
Monday, November 1, 2004
6:00 PM, at the U of A
ECE512 (Electrical and
Computer Engineering)**

**(Southwest of Speedway and Mountain – Parking
available Northeast of Speedway and Mountain
after 5 P.M.)**

Refreshments Provided

Remember

?? We're always looking for topics for general meetings, if
you have an idea or a speaker in mind let us know!

?? Also, check out the website at:

<http://ewh.ieee.org/r6/tucson>

**There is an email mailing list for the Tucson Section. If you
want email notices, you can put yourself on the list. Just find
the link through our website and follow the directions.**