Update: December, 2015

Berkshire Consultants Network Dinner Meeting: December 3, 2015

Tax Reduction with Financial Planning by Stephen Hodgetts and Tucker Roeder, McAdam Financial, LLC

Stephen Hodgetts and Tucker Roeder from McAdam Financial, provided Tax Reduction with Financial Planning in which the goals of tax planning were considered as to minimize ones taxes.

There are many ways to reduce your taxes today, as well as in the future:

Reducing Taxes Today - Reducing Income

Adjusted Gross Income (AGI) is a key element in determining your taxes. AGI even impacts your financial life outside of taxes: banks, mortgage lenders, and college routinely ask for your adjusted gross income. This is a key measure of your finances. Because your adjusted gross income is so important, you may want to begin your tax planning here.

Increase Your Tax Deductions

Taxable income is another key element in your overall tax situation. Taxable income is what's left over after you have reduced your AGI by your deductions and exemptions. Almost everyone can take a standard deduction, and some people are able to itemize their deductions. Itemized deductions include expenses for health care, state and local taxes, personal property taxes (such as car registration fees), mortgage interest, gifts to charity, job-related expenses, tax preparation fees, and investment-related expenses. One key tax planning strategy is to keep track of your itemized expenses throughout the year.

Reducing Taxes in the Future - Utilizing Alternative Savings Strategies

Every retirement savings vehicle has its related tax benefits. Understanding all the different savings strategies that are available to you and how much of your retirement savings should be allocated to each one can have a significant effect on how you will be declaring your income while you are in retirement.

Developing an Efficient Income Strategy

Once you have developed a strategy for saving for retirement, it is important to develop a strategy for how you will be drawing on those assets in retirement. How you spend from your retirement accounts in retirement will determine how much you will be declaring in income each year. Things that should be taken into account are how the dollars you take from each account are tax categorized, how much you should draw from each account each year, how will my Social Security be taxed, how will Required Minimum Distributions affect my income and finally what could tax rates be when I am retired?

Meeting contact: Rich Kolodziejczyk, P.E. Guest Attendance: 11 IEEE Member Attendance: 8

Berkshire Consultants Network Dinner Meeting: October 22, 2015

Financial Planning by Stephen Hodgetts and Tucker Roeder, McAdam Financial, LLC

Stephen Hodgetts and Tucker Roeder from McAdam Financials, provided Financial Planning which include following:

- Comprehensive Financial Planning
 - Overview and Benefits vs. Traditional Money Management
- Factors to Consider in Retirement
 - Withdrawal Strategies and Risks
 - Taxes and Required Minimum Distributions
 - Social Security Strategies

After the talk, individual questions were presented within the group.

Meeting contact: Rich Kolodziejczyk, P.E. Guest Attendance: 7 IEEE Member Attendance: 10



Stephen Hodgetts and Tucker Roeder from McAdam Financial, LLC

Computer and Control Chapter (C&C): September 24, 2015

Can Control Science Bring New Insights to Stock Trading Research? by Ross Barmish ECE Department, University of Wisconsin

This was a question raised at 2013 IEEE Conference on Decision and Control -Florence, Italy, December 2013 by Ross Barmish. In his lecture, he made a case that there are some important open problems in finance which are ideally suited for control theory research. He started his presentation with a quick explanation of what is meant by the notion of "technical analysis" in the stock market. Then he addressed a controltheoretic point of view for a longstanding conundrum in finance: Why is it that so many asset managers, hedge funds and individual investors trade stock using technical analysis techniques despite the existence of a significant body of literature claiming that such methods are of questionable worth with little or no theoretical rationale?

In his lecture he described a new theoretical framework for stock trading – based on technical analysis involving some simple ideas from robust and adaptive control theory. He concluded that strategies analyzed via statistical processing of empirical data can actually be studied in a formal theoretical framework.

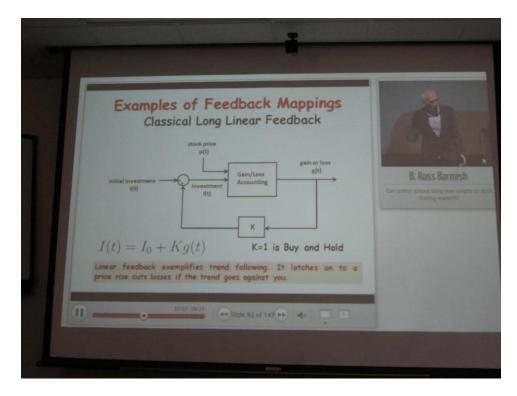
Meeting contact: Rich Kolodziejczyk, P.E. Guest Attendance: 1 IEEE Member Attendance: 7



Control Theory of the Stock Market by Ross Barmish



Proposed Technical Analysis



Example of the Linear Control Loop with feedback

Computer and Control Chapter (C&C): Aug. 28, 2015

Mobile Devices: A Look At Smart Phones, Tablets, and Wearable Technologies By Michael Glaberman, MSG Computers + Genesis10

Mobile devices are one of today's most used resources for every day personal and business needs. From smart phones and tablets, to wearable technologies, mobile devices come in all shapes and sizes. As the software and hardware technologies for these devices are improving, their functions and uses are becoming limitless. What do we use your smart phone for, and what more could we be doing with it? Could a tablet really replace a phone and a laptop? Are these watches really doing more than telling me the time? What mobile device best suits your needs? And the big question: What is next? All of these questions and more were answered. Mobile devices are only going to become more common and more advance in the future. This presentation helped to understand the technologies and uses of all of mobile devices.

Meeting contact: Rich Kolodziejczyk, P.E. Guest Attendance: 11 IEEE Member Attendance: 11



Rich Kolodziejczyk, PACE Chair, opens the meeting and introduces the speaker: Michael Glaberman



The Speaker: Michael Glaberman presenting



Mike explains different Mobile OS



Mike is presented with gifts from Rich Kolodziejczyk on behalf of the Berkshire Section: One year Honorary Membership to the IEEE and Berkshire Section History book.

The IEEE Power Chapter Lunch: July 16, 2015

Study of Lightning Effects - Kennedy Space Center By Frank Fisher

Frank Fisher gave a presentation on the topic of lightning effects at Kennedy Space Center (KSC). Frequent lightning activity in Florida necessitates the need for well-designed protection systems at critical facilities such as KSC. Space vehicle launches require protection against direct lightning strikes, including their indirect effects, as well as nearby strikes. This talk provided insight into the engineering challenges associated with this topic.

Meeting contact: Rich Kolodziejczyk, P.E. Guest Attendance: 0 IEEE Member Attendance: 16



Frank Fisher explains the Kennedy Space Center Complex



Frank discusses a typical U.S. Air Force operation



Well-designed lightning protection systems at critical launch pad

Life Member Affinity Group: Annual Dinner Meeting: May 7, 2015

2015 IEEE Berkshire Section STEM Research Challenge

Presentations by Research Challenge Winners

We have had recognize this year's winners by giving the students a few minutes to talk about their project: how they chose their topic, their research, and any interesting discoveries.

Grades 9/10 prizes: (1st - \$500, 2nd - \$250, 3rd - \$100)

- 1st Isabelle Morley Grade 10, Monument Mountain Regional High School;
 "A Post-Antibiotic Era: The Consequences of Antibiotic Resistance"
- 2nd Ashley Keegan Grade 10, Taconic High School; "Nature vs. Nurture: Athletic Ability"
- 3rd Ryan Serre Grade 10, Taconic High School; "On The Study of Dark Matter"

Grades 11/12 prizes: (1st - \$500, 2nd - \$250, 3rd - \$100)

- 1st William Serkin Grade 11, Monument Mountain Regional High School; "Synthetic Platelets: Refining Nature"
- 2nd Michael Demos Grade 12, Lee Middle and High School; "Dark Matter"
- 3rd Kayla Dillon Grade 11, Monument Mountain Regional High School; "Fecal Microbiota Transplantation: Quackery or Cure?"

From Award Chairman Joshua Clairmont:

Joshua announced the list of winners of the Member Child Awards for 2015 Member Child Awards \$100: Holly Rueger

Meeting contact: George Haus, Education Chair Guest Attendance: 15 IEEE Member Attendance: 15



George Haus, Education Chair Starts the meeting with introduction of 2015 STEM Research Challenge Winners



1st Prize Grade 9/10 Isabelle Morley – Grade 10, Monument Mountain Regional High School



3rd Prize Grade 9/10 Ryan Serre – Grade 10, Taconic High School



1st Prize Grade 11/12 William Serkin – Grade 11, Monument Mountain Regional High School



2nd Prize Grade 11/12 Michael Demos – Grade 12, Lee Middle and High School



3nd Prize Grade 11/12 Kayla Dillon – Grade 11, Monument Mountain Regional High School





2015 IEEE Berkshire Section STEM Research Challenge Winners

The IEEE Power Chapter: April 30, 2015

Presents a "UHV Transmission Lines Worldwide" By Dr. George Gela, BETC

Overhead high-voltage transmission lines in the 800 kV class were built in North America in the 1960s and 1970s. In the last few decades, even higher voltage lines have been designed, constructed and put into operation in Russia (1150 kV, but operated now at 500 kV), China, Japan, and India. Research up to the UHV level of 1500 kV was performed in Lenox and several other laboratories throughout the world.

This talk give an overview of UHV lines in the world, with special emphasis on China, and George's recent trip to participate in the Celebration of the 60th Anniversary of Live Working in China in November 2014.

Dr. George Gela spent 24 years performing a wide range of research and testing at the High Voltage Laboratory in Lenox, MA, which was initially built by GE and donated to EPRI in the 1980s. George moved to Lenox from Columbus, Ohio where he was an Assistant Professor in the Electrical Engineering Department of The Ohio State University. Prior to joining OSU, he was an Industrial Research Fellow at Trench Electric in Toronto, Ontario, Canada. He obtained B.A. Sc., M.A. Sc. and Ph.D. degrees in Electrical Engineering from the University of Toronto in Toronto, Ontario, Canada.

Meeting contacts: David Rueger, Power Chapter Chair Guest Attendance: 4 IEEE Member Attendance: 11



George Gela, the Speaker opens the meeting with 1st slide of his Power Point Presentation



Recognize anyone?



Recognize anyone?



George describes "Towers and Lines problems"



George is presented with a gift from Dave Rueger on behalf of the IEEE Berkshire Section

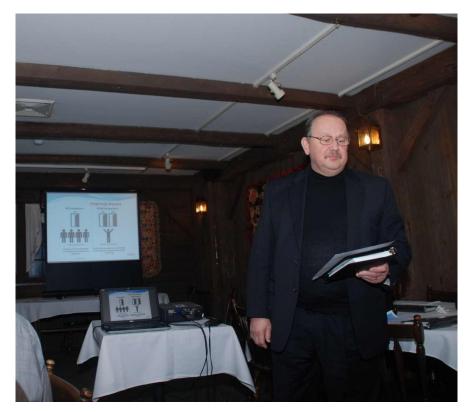
Life Member Affinity Group: National Engineers Week Dinner Meeting: February 26, 2015

Perspectives on STEM Education By Andrew S. Miller

Science, Technology, Engineering, and Mathematics professionals are in demand and the supply is wanting. Government and industry concerns have motivated STEM activities and funding for grades K - 16 to increase the supply. What shape are these activities taking? What are the roles played by colleges, high schools, and elementary schools in the preparation for STEM careers?

Andrew Miller a Senior Life Member of IEEE and long time member of the IEEE Berkshire Section presented his view on this topic. He was also on the EXCOM committee, and in 1983 he established the Berkshire Section Computer and Control Chapter.

Meeting contacts: Rich Kolodziejczyk, P.E. Guest Attendance: 8 IEEE Member Attendance: 12



Rich Kolodziejczyk, PACE Chair, opens the meeting and introduces the speaker: Andy Miller



The Speaker: Andy Miller presenting



Andy explains 'Where the STEM Jobs Will Be in next 2020'



Andy answers question from John Anderson as the group listens to it attentively



Rich Kolodziejczyk, PACE Chair, presents Andy with a gift from the Berkshire Section