WHAT'S NEW

A lot of changes have happened in the last few months, some good and others not so good. In the TN Tech Department of Mathematics, we have had a change of command. Our former chair, Allan Mills, was appointed as the interim associate dean of the College of Arts and Sciences. Consequently, we were in need of a new chair. Michael Allen received that position and is now the interim chair for the Department of Mathematics. We also added three members as full-time faculty to our department. Shelly Forgey, Mark Rogers, and Brents Ring were all hired as lecturers. We would like to give them all a warm welcome to the department.

Other changes include faculty, staff, and students returning to campus wearing face masks. Plexiglass has been installed around faculty and staff desks as well as on podiums in classrooms. Classes are not being taught in the usual manner; many classes are being taught in a hybrid fashion this semester, others totally online. Classrooms only have about half of the chairs in them as they did last year. This is to promote social distancing. Students in classes have been broken up into groups and meet on different days so students won't be bunched together in small classrooms. Faculty are recording lectures and uploading them so students can view them before coming to class. That way, class time can be used as question and answer sessions or for giving quizzes and tests. Stairs have been designated for either up or down traffic and there are designated entrances and exits to the building.

All in all, it's going to be an interesting semester and we will get through it together as we always do.

FAREWELL AND CONGRATS

Farewell to our outgoing chair, Allan Mills. Mills has been with the Department of Mathematics since August, 1995. He started out as an assistant professor and moved through the ranks to become a full professor. In the summer of 2006, he became the interim chair of the department when our former chair, Rafal Ablamowicz, stepped down to spend more time in the classroom. Later, Mills was appointed as the chair of the Department of Mathematics and remained in that position until this summer when he was appointed as the interim associate dean for the College of Arts and Sciences.

Congratulations Allan and thank you for all the hard work you've put in for the department throughout the years. We appreciate what you've done for us. Good luck in your new position.

MEET THE NEW INTERIM CHAIR

Our new interim chair for the Department of Mathematics is Michael Allen. Allen has been with the department since August 1990. He was recently promoted to full professor. In August of this year, he became the interim chair

of the Department of Mathematics. Congratulations Michael.

A word from the new interim chair: Do you remember this line made by James

Earl Jones' character Terrence Mann in the movie 'Field of Dreams'? **"People will come Ray. The one constant through all the years, Ray, has been baseball. America has rolled by like an army of steamrollers. It has been erased like a blackboard, rebuilt and erased again. But baseball has marked the time. This field, this game--it's a part of our past, Ray. It reminds us of all that once was good and it could be again. Ohhhh, people will come Ray. People will most definitely come."**

Similarly, we have that one constant throughout the years, the Department of Mathematics. Faculty retire, students graduate, and time moves on. Change is inevitable. For me, it was the surprise of being appointed interim chair. I promise to do my best. When you visit the department, please drop by and wish me condolences. Second, the halls of Bruner will not be the same. According to the administration, we are on target to move back in one year. Of course, I will believe it when I see it. I hope you and I share the same excitement for our new residence. Finally, Bruner 306 will have a

working heating and cooling unit.

Time marches on and I have grading to do! Take care and see you in the next newsletter.

Michael Allen
Graduate, 89 and 91

NEW FACULTY

This fall the Department of Mathematics welcomes three lecturers. Shelly Forgey, Mark Rogers and Brents Ring were invited to become full-time members of the depart-ment. We spoke with each one and found out a little about them.

Shelly Forgey has been around Tennessee Tech's campus since she was 17

years old as an incoming freshman physics major. Bruner Hall was her home-away-from-home in those days and beyond as she pursued her M.S. in mathematics and then began teaching in the TN Tech Math Department. Shelly says things have really changed since then. Foundation Hall instead of Bruner Hall?! But even that is a trip down memory lane for her because she was in junior high in this building when she was 11 through 14 years old. (Broke a bone in the gym playing volleyball. Ouch!) A wonderful

husband, three children and five grandchildren later, here she is back in the math department doing what she loves--teaching mathematics. Shelly says even though it is quite different and she struggles at times with the challenges we are facing this year, this is still a great place to be, among friends who feel like family.

After nine years at Tech as a temporary instructor, **Mark Rogers** now takes on a new position as lecturer. Having grown up in the Mississippi Delta, he comes to Tech from Ole Miss where he studied combina-torics, particularly matroids, graph

theory, and some unsolved problems of Paul Erdős, under former TBR Vice-Chancellor Tristan Denley. He suspended work on three separate doctoral programs (mathematics, medicine, and education) just before their conclusion, and would urge the graduate students here, "Finish what you start. Don't let yourself get distracted. You'll be thankful later." He might return to those paths again someday, but for now, he'll concentrate on what he's been enjoying more over the past two and a half decades-- teaching a wide range of courses, advising, and the occasional bit of research into a particularly alluring puzzle.
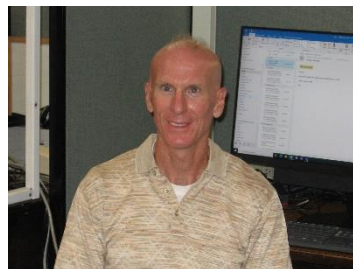
From a lifetime spent as an amateur historian and a marriage spent with a professsional one, he has also enjoyed the intersection between history and mathematics, having taught such courses at both TN Tech and other schools for many years. When he's not in Cookeville (or St. Louis, watching his beloved Cardinals make yet another run deep into the playoffs), he can often be found spending summers in Paris on lengthy vacations that are part research trip, part photography excursion. He also frequently helps the historian in his own household chaperone groups of Tech students to France, Poland, and other dazzling destinations as part of TN Tech's study abroad program. He really should start an Instagram account.
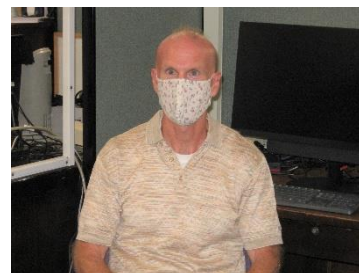
Our newest member to the Department of Mathematics is **Brents Ring.** Brents is a TN Tech alumnus, having received a B.S. in mechanical engineering from Tennessee Tech. He also has an M.S. in mechanical engineering from Georgia Tech and M.S. degrees in mathematics from MTSU and UT Knoxville. He taught for 10 years at MTSU in mathematics and one year at UT Martin in engineering. He is very active, lifting weights, running, and swimming five to six days a week. He likes automotive repair, home improvement, riding motorcycles, and studying Koine Greek.

LOOK WHO'S TEACHING

This semester we have four graduate students teaching classes for our department. Seth Agee is teaching one section of Math 1530 and Steven Buchanan, Caleb Gilmore, and Chris McDonald are each teaching two sections of Math 1130. This is in addition to attending graduate math courses and doing research for their theses.

Seth Agee is originally from Smith County, Tennessee. He received his B.S. in mathematics with a minor in computer science from Tennessee Tech. He is currently studying probability theory and stochastic differential equations under the advisement of Motoya Machida. When he is not doing math, he loves to cook, go to the gym, and spend time with friends and family. When he finishes his

degree, he hopes to go on to get his Ph.D. in math, statistics, or computer science.

Steven Buchanan is from Kingsport, Tennessee. His research interests are in number theory and algebra. His research advisor is Andrew Hetzel. Steven and associate professor Hetzel had an article published in the May 2020 edition of The American Mathematical Monthly (MAA) Vol. 127, No. 5. This journal is very well-known and the acceptance of their work for publication is a noteworthy achievement. The title of the article is "On the Success of *Seriously* Mishandling Euclid's Lemma." In Steven's spare time, he likes reading or playing video games.

Caleb Gilmore is from Knoxville, TN, specifically the Hardin Valley area. He has been working under the direction of Andrew Hetzel on results in ring theory. His thesis will be centered on "potently primary ideals," which serve as a generalization of prime ideals at the level of powers of ideals. He would like to teach, preferably at the college level, when he finishes his master's degree. When he is not working on math (class or research) or spending time with his wife, he enjoys playing board games or going golfing with friends.

Chris McDonald is from Gallatin, TN. He received his B.A. in mathematics from Vanderbilt University in 2016. In addition to standard graduate coursework, he is doing research in the area of commutative ring theory. Specifically, his research is on *2-absorbing ideals* under the direction of Andrew Hetzel. Outside of math, Chris enjoys learning about biology, physics, and computers. Since he was a kid,

his favorite creative outlets have remained skateboarding, piano, guitar, and drawing.

MATH CLUB

The Math Club will have its first meeting of the semester virtually on ZOOM Tuesday, September 22, at 11 am. This year's president is Madison Pearson. If you are interested in the joining the Math Club, you can contact Madison at mepearson42@tntech.edu.

ZOOM meeting information:
Meeting ID: 939 1984 7142
Passcode: math

CONGRATS

Congratulations to Wendy Smith on her promotion to senior lecturer.

Congratulations to Michael Allen on his promotion to full professor and appointment as interim chair of the Department of Mathematics.

Congratulations to Allan Mills on his appointment as interim associate dean in the College of Arts and Sciences.

Congratulations to Padmini Veerapen on the birth of her baby this summer.

Don't forget to wear your mask.