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September 24, 2024

Dr. Sebastian Casalaina-Martin  
Professor and Chair  
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Dear Dr. Casalaina-Martin,

This is the Primary Unit Evaluation Committee (PUEC) report concerning the *reappointment* of **Harrison Stalvey**, and his *promotion to Associate Teaching Professor* in the Department of Mathematics at the University of Colorado Boulder.

## 1 Introduction and Summary

The PUEC was formed by the Chair of the Department of Mathematics, Professor Sebastian Casalaina-Martin, in the Spring of 2024. The committee consists of the following members of the Department of Mathematics: Professor Markus Pflaum (Chair of the PUEC), and Associate Teaching Professor Joseph Timmer.

Dr. Stalvey's performance was evaluated by the PUEC in accordance with the policies of the College of Arts and Sciences for reappointment and promotion of non tenure-track faculty, as described under the included checklist.

The PUEC voted **2-0** to rank Dr. Stalvey's teaching as **excellent**, and **2-0** to rank his service as **meritorious**. The PUEC then voted **2-0** to recommend that Dr. Stalvey be **reappointed** and **promoted** to Associate Teaching Professor.

Dr. Stalvey received his Ph. D. in Mathematics from **Georgia State University** under the direction of Professor Draga Vidakovic with a thesis titled *The Teaching and Learning of Parametric Functions: A Baseline Study* in August of 2014. Dr. Stalvey joined the Mathematics and Statistics Department at **Georgia State University** as a visiting lecturer from August of 2014 to August of 2019. Thereafter, he joined the Department of Mathematics at the **University of Colorado Boulder** as lecturer before being hired as an Instructor (previous title of Assistant Teaching Professor) in 2019. Dr. Stalvey was reappointed in this role in the 2021-2022 academic year.

## 2 Evaluation of Teaching

### 2.1 Teaching Summary

We describe Dr. Stalvey's teaching in two parts: (1) his work teaching in the Mathematics Department at the University of Colorado Boulder, primarily in undergraduate service courses, and (2) his work as a course coordinator, which involved mentoring graduate teaching assistants (TAs), undergraduate learning assistants (LAs), lecturers, and teaching postdocs.

1. *Undergraduate Teaching*: Since Dr. Stalvey's reappointment in the Academic year 2021-2022, he has taught 5 different courses, two of which were for graduate students. The undergraduate courses are *Precalculus* (MATH 1150), *Calculus 1* (MATH 1300), *Introduction to Discrete Mathematics* (MATH 2001), and *Precalculus Supplemental Lab* (MATH 1151). The two graduate courses are *Mathematics Teacher Training* (MATH 5905) and an independent study for Ph. D. students in Mathematics Education.
2. *Course Coordination*: Dr. Stalvey has been the course coordinator (the faculty member in charge of coordinating a large number of sections of the same service course) for 3 courses: PreCalculus (MATH 1150) for three semesters, Calculus 1 (MATH 1300) for six semesters, and Calculus 3 (MATH 2400) for one semester. This is a major service not only to the Mathematics Department, but has a marked impact to undergraduate experience for many students beyond his primary unit's. Note the aforementioned counts include summer courses.

### 2.2 Multiple Measures of Teaching

We have evaluated Dr. Stalvey's teaching using the following standard metrics/multiple measures: FCQs (with student comments) since last reappointment, classroom interviews, student letters, peer observations and evaluations, evaluation of a course portfolio, and a detailed evaluation of Dr. Stalvey's duties as course coordinator.

#### 2.2.1 FCQ Summary and Student Comments from FCQs

The FCQ reports from Dr. Stalvey's last reappointment cover Fall 2021 through Spring of 2024. Over this period, Dr. Stalvey's average rating was above the departmental average for every question. With regards to the instructor questions, Dr. Stalvey's average scores were at or above 4.5/5.0, with the exception of the question "Explained the grading criteria for assignments", which was a 4.3/5.0. We note the departmental average for this question is a 4.1/5.0.

The PUEC would like to note the guidance from the University that numerical FCQ scores by in large do not indicate excellence in teaching, but can be an indication of substandard teaching. Dr. Stalvey's scores clearly indicate his teaching is not substandard and we have found evidence of excellence in teaching in the other measures described below.

The student comments from Dr. Stalvey's FCQs are inundated with positive comments about his teaching, professionalism, and dedication to his teaching. The overwhelming number of these comments make it abundantly clear that students hold him in high regards with his ability

to teach. Below is a small sample of these comments:

- “You’re absolutely amazing. The way you’ve sought different ways of teaching the material is great. I enjoy your side tangents and additional questions. Your outfits are also amazing. I want to be just like you when I **group** up, honestly. You’re also very helpful in office hours, you definitely know how to guide a student into the right direction without giving too much information. I would suggest to start using ‘QED’ instead of the box, To you know.....spice it up a bit. Thank you for showing some analysis proofs as well!” MATH 2001, Spring 2022.
- “Harrison is an incredible professor. He is no doubt one of the best teachers i’ve ever had, not just in college but in my whole educational career. His teaching style is amazing, and the way he makes calculus fun and enjoyable is something every student should experience. I could go on and on about how incredible of a teacher he is. He really cares about his students, and my favorite parts about his class is that whenever a student says something wrong or answers a question wrong, he corrects them in a way that doesn’t make you feel bad or ashamed. I felt like I could always participate without being judged by him, and this is such an important quality and aspect of professors that make me feel welcomed on this campus. Also, his references to media during calculus just make the class and subject so much more tolerable and fun. I found myself looking forward to going to class. CU needs more professors like Harrison!” MATH 1300, Spring 2022
- “Harrison was a really great teacher. He taught very effectively and got the lesson done on time every time. There was also plenty of opportunities to go to office hours and get the help you need.” MATH 1150, Fall 2023
- “wow what a great class! The notes are very clear and easy to understand and the atmosphere in the classroom was great. Despite the extremely heavy workload, this was one of my favorite classes and instructors this semester :)” MATH 2400, Fall 2021
- “I think you are a good choice to teach this course because it is clear to me that you care about teaching and the students. I appreciated how you would bring in real-life current examples of things you faced in the classroom and discussed them with us. It showed that teaching is an ever evolving/learning experience and it helped us think critically about our own effects in the classroom. If I ever have questions concerning teaching, I will most certainly come to you for your take on it.” MATH 5905, Fall 2021

There were some criticisms to be found in these student comments. For the undergraduate courses, these few comments were mostly related to the posting of lecture notes onto Canvas, complaints about the course structure (like exam timing), and falling behind according to the course schedule due to tangents. In particular, the comments about falling behind were relegated to a single course and, like the other criticisms, are few and far between.

One of Dr. Stalvey’s core teaching assignments has been MATH 5905, Mathematics Teacher Training. This course, which first-year graduate students take in Fall and second-year graduate students take in Spring, is very important to the department as it provides some training for graduate students when they teach classes. The FCQ scores and comments overwhelmingly support Harrison’s excellent work in teaching this course and its positive affect on graduate students. The FCQ comments, like the ones for the undergraduate courses, are overwhelmingly positive. The criticisms found in these comments **are generally limited to the Spring sections of the course.** Nearly all the criticisms found about the Spring course are countered with a

praise for how the course was run. There are a lot of differing opinions how MATH 5905 should be run and despite the impossibility of catering to this different opinions, Dr. Stalvey has done an excellent job making MATH 5905 an effective course for training graduate students in mathematics instruction.

### 2.2.2 Student Letters

Included in this dossier are two letters, written by students, that provide further evidence of Harrison's positive impact on student learning and graduate student education in pedagogy. After the end of the Spring 2024 semester, the Department of Mathematics solicited letters from students about Dr. Stalvey's teaching. One student from his MATH 5905, Mathematics Teacher Training class responded, and one student from his Calculus 1 class. We refer to them as Student1 and Student 2. Both praise Dr. Stalvey's teaching. Let us cite what Student 1 writes:

...I have gotten to know Dr. Stalvey's teaching as authentic, engaging, enjoyable, and (of course) successful. This is partly because while he has many teaching practices and philosophies, he is exceptional at putting them into practice. His MATH 5905 class has a literal focus on student learning, but he actually demonstrates this while teaching the class, ...

Later, Student 1 writes:

As an exceptional teacher, mentor, coworker, and leader, Dr. Stalvey has filled a unique and indispensable role that is especially felt by us graduate student teachers.

and then ends the letter with the following:

As an exceptional teacher, mentor, coworker, and leader, Dr. Stalvey has filled a unique and indispensable role that is especially felt by us graduate student teachers. My own growth as a teacher at CU reflects his investment in our department's instructors. For all these reasons and many more, it is a privilege to highlight Dr. Stalvey's positive impact on our department's graduate student teaching in support of his promotion to Teaching Associate Professor.

Student 2 praises Dr. Stalvey's welcoming and supportive way of teaching which is later confirmed in an independent faculty evaluation letter:

As someone who hasn't taken college level mathematics in years prior to CU, he dispelled all anxieties and made my experience welcoming and trouble-free. His consistently positive-attitude provided a wonderful and pleasing environment to learn in, where I always felt comfortable to ask a question and get support when need be.

At the end of the letter, Student 2 writes:

Dr. Stalvey's knowledge, passion, and positive attitude make him both a great professor and mentor. I truly believe he is a great asset to the university's mathematics department and thus have no doubt he would continue to excel as a Teaching Associate Professor. Thank you for considering my recommendation.

Overall, the PUEC was impressed by the uniformly positive feedback students gave about Dr. Stalvey's teaching. And it is clear that Dr. Stalvey has the talent to connect with students in the sense that he understands the problems many students have with higher mathematics and that he knows how to properly address those problems in the classes he teaches.

### 2.2.3 Peer Reviews of Teaching

Included in this dossier are four peer observations of Dr. Stalvey's courses. Each observation attests to Dr. Stalvey's excellence in teaching and his rapport with students. Below are selected comments, one from each observation, that support this conclusion:

- "This was only the third lecture of the semester but Dr. Stalvey already seems to have a very good relationship with his students. They are not Math majors but he knows how to provide the right amount of examples and detail to keep them motivated and interested. He is patient, deliberately pauses to give the students time to absorb new material and very effectively uses active learning strategies to keep them engaged. He used computer calculations presented on the beamer and otherwise the blackboard very effectively. His writing and boardwork is impeccable. He clearly has a lot of experience teaching courses like Calculus and brings a lot of empathy and intuition to what his students need." Dr. Peter Mayr, Fall 2024
- "Harrison had a well-run classroom with attentive and responsive students. While they engaged with one-another minimally, I think the class still worked well and set the students up for a successful learning experience." Dr. Nathaniel Thiem, Spring 2023
- "Dr. Stalvey demonstrated a great classroom dynamic, in which the students were comfortable asking and answering questions from Dr. Stalvey, as well as from their peers. Students came prepared to collaborate and ask questions, and Dr. Stalvey's decision to have students to work in groups aided in students' understanding of course content and aided in their development of how to communicate their understanding to others. The student generated discussions were lively, and well facilitated by Dr. Stalvey. When appropriate, Dr. Stalvey made knowledgeable use of the features of technology, such as Desmos and the projector, to highlight connections and key ideas. I would rate Dr. Stalvey's class as "Excellent" and believe his instruction will only improve as he continues to reflect upon and evolve his teaching. Having an instructor such as Dr. Stalvey, who pushes himself, only makes the department stronger as a whole." Dr. Lee Roberson, Spring 2022
- "I genuinely enjoyed observing this class. Harrison's pacing was spot-on; the class didn't feel rushed or slow. I always find it is a good sign when I leave an observation reflecting on my own practice and how I can incorporate some of the innovative approaches I just witnessed, and this is exactly what I encountered here. I think Harrison is a great asset to our department and I am grateful to have had the opportunity to observe him in action." Dr. Elizabeth Grulke, Fall 2021

### 2.2.4 Faculty Evaluation Letters

In addition to the peer observations of teaching, this dossier also includes two letters of evaluation by faculty members of the Department of Mathematics. We refer to the corresponding

letters as *Faculty Evaluation Letter 1* and *Faculty Evaluation Letter 2*. Both letters are full of the highest praise for Dr. Stalvey's teaching and service, as well as reaching conclusions that are consistent with the PUEC.

In **Faculty Evaluation Letter 1** Dr. Stalvey's is commended for his quality of teaching:

When Harrison was hired, I observed one of his classes; his teaching was good then, but now he is one of the best I have seen. Each semester, he reworks his notes, refining his examples and tailoring his lectures to his current classes.

In addition to Dr. Stalvey's teaching, the author of Letter 1 also makes a comment about his scholarly work. The letter writer states:

While it is not part Harrison's job requirements, he has published two articles in peer reviewed journals, appears in three peer reviewed conference proceedings, and has presented at 13 conferences and seminars since joining CU.

The PUEC regards Dr. Stalvey's scholarly work as important and **beneficial** for his teaching since it keeps Dr. Stalvey up to date about what is happening in the mathematical sciences and since it connects him with others in the field.

**Faculty Evaluation Letter 2** is also full of praise for Dr. Stalvey's teaching:

In both instances, it was abundantly clear what a seasoned instructor Dr. Stalvey is. In particular, his clarity and pacing is something I would like to strive for. His classes are relaxed, interactive, and students are attentive and involved. Overall, his manner and sense of humour promotes an atmosphere of calm and welcome, something that is important in low-level service courses in mathematics, where anxiety can run high.

The only criticisms that could be found within these letters are the same that have been mentioned previously: the difficulties in teaching MATH 5905 and the criticism of Dr. Stalvey's pace in lecture. The PUEC finds the criticisms of Dr. Stalvey's pace in lecture is singularly restricted to the Calculus sequence that he often teaches and can be entirely explained by the sheer amount of material that must be covered in these courses. In addition, there is a vast amount of evidence that Dr. Stalvey's pace in these courses is perfectly tailored by other student comments, as well as by peer observations of these courses. Regarding the criticisms of MATH 5905, the author of Letter 2 as well as the PUEC, find them attributable to the differing opinions that exist about best teaching practices and in spite of them, Dr. Stalvey has an overall positive review of his teaching of the course.

## 2.2.5 Reports from Class Interviews

As an additional measure of teaching success, peers from the Mathematics Department conducted an interview of one Dr. Stalvey's classes in the fall of 2023. Dr. Stalvey left classroom so the interview could be conducted with student anonymity. The interview was conducted by Professor Eric Stade, and Associate Teaching Professor Joseph Timmer.

- To the question, "What is the most effective aspect of Dr. Stalvey's teaching?", 14/18 students interviewed responded with "He is very effective and knowledgeable at his lecture,

he explains things clearly and his board work is effective. Provides excellent examples for notes while interacting with students during the process”, and 4/18 students responded with “He will go over something in class until we are comfortable with the topic and makes sure to make time for us to say we aren’t understanding or comprehending what or how he is teaching it”.

- To the question “What could Dr. Stalvey do differently to improve learning in this class?”, 17/18 students responded “The written homework for this course could be improved. Saving the most difficult questions for at home work is good for brainstorming, but spending more time in class discussing it would be beneficial. Expanding our knowledge and critical thinking about the topics as a class → more peer to peer interactions”, and the remaining student voted for “Can’t think of anything. He provides a great basis for studying outside the class and gives us many opportunities to reach out if we need help outside of class hours”.

### 2.2.6 Evaluation of a course portfolio

As an additional measure of teaching, Mathematics Department Associate Professor Sean O’Rourke and Professor Nathaniel Thiem evaluated Dr. Stalvey’s teaching portfolio for *Introduction to Discrete Mathematics* (MATH 2001) as part of the Teaching Quality Framework (TQF). They rated his portfolio on the following scale:

- **Entry into teaching.** This category generally means there is a need for improvement, and the steps that need to be taken should be carefully described.
- **Basic skill.** This category indicates that the instructor is competent in this area. In our department we typically aim to be somewhat better than just competent, but it is deemed acceptable. Here we expect see some suggestions for how to improve.
- **Professional.** This category indicates stellar performance in this area.
- **Advanced.** We expect this category to be used only in truly exceptional circumstances and it should be unrealistic to expect this designation in many areas. Because this is a more global rating (evidenced by multiple measures of excellence), we do not assign this rating for individual reports (in particular, Professional is the highest possible rating for this report).

Drs. O’Rourke and Thiem ranked Dr. Stalvey’s portfolio as **professional** in every category. We provide their conclusion here:

Overall, the portfolio indicates a *professional* level of teaching. We believe Dr. Stalvey has a very carefully designed, yet evolving course that strives to maximize student engagement. Our only minor recommendation would be (if he does not already do so) to add some proactive feedback collecting during the course of the semester.

This assessment is in agreement with our findings and our own assessments in the rest of this report.



### 2.2.7 Course Coordination

One of the more difficult tasks of teaching faculty in the Mathematics Department is coordinating the many sections of a lower-division course. The coordinator ensures the uniformity of policy and grading from year to year and across sections in a given semester. The coordinator also sets up and maintains the Learning Management System for the course, coordinates common evening exams, ensures disability accommodations are met, handles Honor Code violations, manages student complaints (and their parents), and conducts weekly meetings with and supervises the professional development of the TAs, LAs, and lecturers/instructors teaching under them.

Dr. Stalvey has been the course coordinator for *Precalculus* (MATH 1500) for 3 semesters, which averages 7 sections per semester with approximately 220 students; *Calculus 1* (MATH 1300) for 5 semesters, which averages 20 sections per semester with approximately 630 students; and *Calculus 3* (MATH 2400) for 1 semester, which had 16 sections and approximately 440 students. This service not only contributes to Dr. Stalvey's primary unit, but has impact throughout the University given the large number of students who take calculus.

Additionally, Dr. Stalvey teaches *Seminar in Guided Mathematics Instruction* (SIGMI) (MATH 3850) while coordinating. In this class, the coordinator instructs the Learning Assistants (LAs) (who are primarily students with an interest in secondary education) and Teaching Assistants (TAs) in pedagogy, helping them develop as teachers, and ensuring they are capable and comfortable helping teach the various sections of the recitations. Together with Kevin Manley, he created new projects and active learning materials for *Precalculus* (MATH 1150). With Kevin Manley, Lee Roberson, and Joseph Timmer, he redesigned and created a vast amount of active learning materials and assessments for *Precalculus* (MATH 1150). He has also developed and created the materials for a new course *Calculus 1 Supplemental Lab* (MATH 1301), which is designed to help students who need additional support to succeed Calculus 1.

## 2.3 Conclusion of Evaluation of Teaching

Upon this review of Dr. Stalvey's teaching record, FCQ scores and comments, peer reviews, classroom interviews and student letters, and course materials, Dr. Stalvey's excellence in teaching is plain for all to see. First, Dr. Stalvey has an unparalleled dedication to teaching and creating a welcoming environment for his students. Second, Dr. Stalvey continues to innovate and refine his efforts and methods in the classroom. His incorporation of his personal teaching philosophy has made a profoundly beneficial impact in his own courses, but also in the courses he coordinates. Finally, Dr. Stalvey is very generous with his time to share his knowledge with students, colleagues, and future educators.

The PUEC voted **unanimously** that Dr. Stalvey is **excellent** in teaching.



### 3 Evaluation of Service

#### 3.1 Summary of Service

Dr. Stalvey has provided quite some significant service to the Department of Mathematics since his reappointment in 2022. He is a member of the departmental Diversity Committee since Fall 2021 and has served on the Undergraduate Committee since Fall 2022. Both are standing committees of the Department of Mathematics, important and quite time consuming. Dr. Stalvey served twice on hiring committees for Teaching Postdoctoral Scholars, namely in March 2022 and April 2023. Particularly important for the success of undergraduate teaching in mathematics has been and still is that new lecturers and graduate students receive appropriate training and mentoring to fulfill their tasks and to be able to teach mathematics for a pretty diverse cohort of **undergraduate** students. Dr. Stalvey has been very engaged in the Mentoring Program for New Lecturers since 2018 and also taught the Mathematics Teacher Training continuously since Spring 2019.

Since his reappointment, Dr. Stalvey served as the coordinator of a calculus course nine times, which is an extraordinary task since these courses consists of up to 800 students, and the course coordinator has to supervise the instructors who teach the many sections needed for such a large group of students.

Last but not least, Dr. Stalvey fulfilled the role as Placement Coordinator for the Precalculus Supplemental Lab since Fall 2018.

#### 3.2 Conclusion of Evaluation of Service

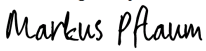
Dr. Stalvey's service is substantial and significantly more than what one can normally expect from a teaching assistant professor. The PUEC unanimously found his engagement for matters of undergraduate education and for mentoring of teaching postdocs and graduate teaching assistants impressive and highly **beneficial** for the Department of Mathematics.

The PUEC voted **unanimously** that Dr. Stalvey's service is **meritorious**.

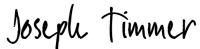
## 4 Conclusion of PUEC Report

Dr. Stalvey is an outstanding teacher in the classroom and an established expert in the didactics of mathematics. He has shown continued and significant growth in his teaching after his **reap-pointmet.** Likewise, his service appears to be of sustained growth. The departmental PUEC voted **unanimously** that Dr. Stalvey be **reappointed** and **promoted to Teaching Associate Professor.**

Sincerely,

DocuSigned by:  
  
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Markus Pflaum  
Professor of Mathematics  
(Chair of PUEC)

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Joseph Timmer  
Associate Teaching Professor of  
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