

**Executive Committee Meeting Minutes  
ANS Mathematics and Computation Division  
2019 Annual Meeting**

**Sunday, November 17, 2019 2:00-4:00 pm  
Park 8222, Marriott Wardman Park, Washington, DC**

The following proxies were assigned for this meeting:

Chris Perfetti has proxy for Sebastian Schunert

Travis Trahan has proxy for Kendra Keady and Matthew Cleveland

**I. Call to Order, Attendance, Introductions**

Dave G. called the meeting to order at 2:08 PM. We do have quorum. The attendance sheet is included as Appendix A.

**II. Officer Reports**

**a. Secretary: Tara Pandya**

**i. Approval of minutes from 2019 Annual Meeting in Minneapolis, MN**

The minutes were approved by electronic vote on June 21, 2019. They were sent to national via Valerie and uploaded to our MCD site and the archive.

**ii. Approval of agenda**

Brian K. motioned to approve the current agenda and Chris P. seconded. The motion was approved.

**iii. Review of electronic votes conducted since last meeting**

We voted to approve the proposed 2020 budget with 12 in favor and 2 abstain on September 20, 2019.

**b. Treasurers Report: Brian Kiedrowski (report attached as Appendix B)**

- Sent the proposed budget to ANS.
- We are still on budget.
- We have not heard back from MC2019 so we do not know how much money MCD will be getting.
- Dave G. brought up that the student conf. reps are coming to ask for sponsorship during this meeting. For 2020 we have \$3500 in the budget because we were not sure if our budget would get cut based on discussion at the annual meeting.
- We suggest giving \$2500 with \$250 earmarked for an MCD best paper award. We will bring up a motion when the students come around.

**c. Vice-Chair Roundtable: Bob Grove**

- Bob passed off the update to Steven H. since he organized it.

- The roundtable is Monday afternoon titled: “Advanced computing architectures for production nuclear applications.” There will be 4 panelists: Teresa Bailey, Randy Baker, Elliott Biondo, and Kyle Remley.
- We have a second panel session after that roundtable that Travis T. and Brendan K. organized: “Best Practices of Nuclear Software Quality Assurance.” There will be five panelists: Ross Bartlett, Forrest Brown, Greg Galletti, Scott Palmtag, and Cody Permann.

**d. Chair: David Griesheimer**

**i. Presidents Meeting with Professional Division and Committee Chairs report**

- The operating budget deficit is \$900K
- Total deficit is \$700K
- During November there were two phone calls between the Division Chairs and the authors of the Change Plan. These calls highlighted that the divisions are not in favor of the proposed changes regarding division finances and topical meetings.
- The feedback from the divisions was attempted to be incorporated in the draft of the change plan
- We should all be 1ANS, no distinction between national and the divisions
- There was a lot of discussion with the LSC and student sections
- Current ANS Change Plan calls for a reduction in standalone topical meetings to no more than 6 per year, with no overlapping meeting or meetings on consecutive weeks.
- National will be taking over all management logistics of meetings
- Decisions on Change Plan topics related to Division Finances (including Topical Meeting revenue) have been deferred until March 31, 2020. A task force of ANS staff and Division chairs will be formed to address these topics.
- Decisions regarding topical meeting locations and coordination/co-location of topical meetings will be left to the Divisions.
- Paula Cappelletti mentioned several times that she has received feedback that the technical content of National meetings is weak. The NPC is working on addressing these concerns, but no further details were given.
- Details of the 2019 financial performance of the Society and the 2020 budget will be provided in the Board meeting at the end of the week.
- Brendan asked if there are plans to provide more details on the operating deficit? Dave replied if the plan is adopted, expect 90% to be adopted by board vote. Following this vote, the ANS CEO (Craig Piercy) will work with the staff and Society officers to develop an implementation plan. Following the National Meeting, Craig will also perform a 60-day operational review of the (40 FTE) ANS staff and will implement cost-saving measures identified during this review.
- Bob added that Craig Piercy, the new ED, seems to have the experience and the ability to make sure the 60 day review of ANS staff will be useful.

## ii. PDC meeting topics.

- The PDC is meeting on Tuesday.
- They want division input on the proposed merger of IRD and BRD which will be called IRD. No thoughts from us on that (this merged was approved).
- There is a big push to reduce the cost of national meetings. This means cutting Thursday, eliminating late evening sessions and reducing the number of rooms needed. There is a big push to reduce in-person committee meeting and do these virtually. And to move talks to posters. Should there be any requirements having the divisions have any sessions at the national meetings or any papers? This will be discussed at the PDC. Note that the PDC chair clarified that there is no minimum requirement for papers or sessions at the National meetings.
- Miriam suggested we try to have a panel targeted toward students and graduate students at each meeting. A suggestion to have this at the student ANS meeting was also made.
- Travis noted that most of the people coming to the national meetings are those coming to committee meetings.
- Dave noted we do not have time in this meeting to poke holes in the change plan. Comments, suggestions, and criticisms regarding the Change Plan should be forwarded to Dave, who will collect them and forward the information on to National.
- All of the divisions are working together and trying to voice their opinions.
- What about having tech sessions at the winter meeting only and doing in-person EC meeting at the winter meeting?
- Dave thinks we need to have a plan to bring to national. So we should get together with RPD and potentially other divisions and decide how we want to handle topical meetings.
- What about incentivizing rejecting low quality papers? MCD already does this pretty regularly which has been enforced by Steven and Brian.

## III. Standing Committees

### a. Benchmark: Chris Perfetti and Sebastian Schunert

- Sebastian has not made much progress and neither has Chris.
- Dave noted that the benchmarking effort was highlighted as a major initiative in the recent Division report to the board. The Board report also stated that the Division was working towards a prototype release of the benchmark suite by the end of the year.
- Tara will link the github site on the MCD website once we get something on there.
- We will set up pull requests for those who want to contribute content and it will be reviewed by Chris and Sebastian.

- The plan is to get some analytic benchmarks up there and then focus on adding inputs and outputs for these benchmarks.

**b. Finance: Brian Kiedrowski**

Nothing different than what was reported in the Treasurer report in II.b.

Craig Piercy stopped by our meeting. He said he could answer any questions we had.

- The provisions related to division finances have been put on hold and he will put together a working group to make recommendations to the board on this by March 31.
- There are much deeper issues than the finances between the divisions and the society as a whole. There are certain things that need to be fixed, like revenue sharing without risk sharing. We need mutual incentives.
- Chris P. asked: Has ANS hired any professional business consultants?  
Craig replied: Within the margin of error when we discuss the revenue changes. A 60 day operational review will start the day after this winter meeting. Craig is going to be the business consultant. We need to improve our modeling of these changes and how it affects us financially.
- Travis T. asked: How do we weigh the individual needs of each division when overhauling the society as a whole?  
Craig replied: There will be flexibility but there isn't a specific answer or metric. It is recognized though.

After Craig left, Bob pointed out that he thinks this is the first time an executive has come to one of our committee meetings since most of us have been involved.

**c. Honors and Awards: Piero Ravetto**

- Not much to report since these are awarded every other year.
- We need to think about nominating people soon.
- What about fellows? We should keep our eye out for people we think are fellows and we need to be more proactive about finding them. But the deadline is Jan 15 so probably cannot make this round by we will try for 2021.

**d. Standards: Paul Hulse**

Tara reported on the report Paul Hulse sent since he could not attend. It is attached as Appendix C.

**e. Membership: David Griesheimer**

Nothing to report as we only get updates at the beginning of the calendar year.

**f. Nominating: Dmitriy Anistratov**

Dima has a list of nominees for the upcoming elections that was finalized on Friday.

**IV. Program Committee Report: Steven Hamilton and Brian Kiedrowski**

- Get on the reviewer list!
- Emily Vu and Aaron Olsen got the best paper summary from the national meeting. Neither were here so their certificates were mailed. Emily also received money as approved from our previous meetings as is standard for students who win the best paper.
- For M&C2023, we need to put together a call for bids at the next meeting.

**a. Update on technical program for this conference**

- 26 summaries across 6 presentation sessions. 1 roundtable and 1 panel.
- 4 co-sponsored sessions.
- Send suggestions on future thoughts on panels and sessions.

**b. Summary of M&C 2019, Portland, OR Todd Palmer**

No final report yet so no update from Todd.

**c. Update on M&C 2021, Raleigh, NC Yousry Azmy**

Yousry came in at this exact time to give us an update.

- OR/K ANS will help host.
- Committees are fully formed.
- Got final publication approval this morning.
- Presented to NPC this morning but they need the initial budget. Hopefully Shane Stimpson can have it in the form they want by Tuesday of this week.
- Call for papers will come out in April 2020.
- Dima said the review process will be summaries and then full paper reviews.
- We would like the proceedings to be better than MC2019. Ellen is retiring so not sure what ANS national will handle.
- Can we use the updated system of EPSR for this? No timeline? We will need to have a backup plan.
- Plan to use ANS for registration.
- Meeting will be April 11-15, 2021.
- Should we continue the student competition with the judges in the audience. Yes. Do some planning ahead of time.

**V. 2020 ANS Student Conference, Raleigh, NC**

**a. Update from the organizing committee: Ishita Trivedi, NCSU**

- Students came in at 2:50 pm (flyer attached as Appendix D).
- Ishita is the general chair.
- They gave us a review of when the student conference will be and where it will be.
- They asked for financial and technical support.
- They gave us their sponsorship levels (there are 3 and the flyer is attached as Appendix E).
- They also sent around a sign up for paper reviewers, judges, etc.

#### **b. MCD financial support for 2020 student conference**

- Brian K. motioned we will give \$2500 with \$250 earmarked for the MCD student paper award and Tara seconded. This motion was approved.
- We can have a division rep give out the award at the student conference ending banquet.

### **VI. MCD Scholarships: David Griesheimer**

#### **a. Gelbard funding status**

- There was a fundraiser at M&C 2019 but we need to know how much gets transferred for this and we need a formal commitment.
- We do not know how much we have left to fully fund it because we need the updated stock market report at the beginning of the year. Dave will try to get it from Stacy. Update after this meeting: As of 11/17/2019 the Gelbard Scholarship fund has \$50,680. This is \$19,320 short of the fully-funded amount of \$70,000.
- Forrest thinks we should vote right now and decide to fund it fully.
- Dave reminded everyone that we cannot do it right now because we do not know how much money is left to fund it.
- Forrest then suggested we commit \$5000 right now because we need to make progress and not keep stalling.
- Dave mentioned that the scholarship fund is invested in the stock market and subject to market fluctuations so we should be cautious about transferring money to the fund. Furthermore, if the spend amount for the scholarship (determined by ANS) is less than the award amount of \$3500 then the division will be obligated to fund the difference. Dave strongly recommended waiting to get more information about the M&C 2019 donation, the 2019 investment income, and the 2020 spend amount before making any decisions regarding additional Division contributions to the fund.
- We plan to make the final decision on funding before or by the end of the 2020 annual meeting.
- Ben Forget received confirmation via text message from Rich Martineau that the M&C 2019 fundraiser made \$12,600 plus \$1500 coming from Marv Adams in net profit. This information was forwarded to Brian and he will coordinate ensuring this money gets into the scholarship fund

In the future, we will need to discuss the large amount of money in the Dannels scholarship as large sums have been donated by his relatives.

#### **b. MCD scholarship committee**

- The committee is in place and Scott McKinley is still the chair.

- The Vice Chair will serve on the committee going forward and reviews will be in the spring.

#### **VII. ANS Change Plan 2020 Discussion: David Griesheimer**

- Everyone wants more transparency and to see the exact budget and numbers that have led to the changes proposed and that this leads to profit.
- Student support going forward will come from a different pot of money, not through the division. Therefore, MCD does not need a large operating budget because it is mainly for scholarships.
- For meetings, the deeper issue is that we are responsible for sponsorship but we see no money.
- Who can we partner with and how are these new topical meetings going to be run?
- Does co-locating actually save money? It seems that national staff do not actually have the numbers to support this statement.

#### **VIII. New Business**

None

#### **IX. Adjourn**

Tara motioned to adjourn at 4 pm, Chris P. seconded. Motion was approved and the meeting adjourned.

Following the EC meeting, Dmitry Anistratov was awarded a plaque recognizing his contributions as the 2018-2019 Chair of the division.



# Appendix A

**Mathematics & Computation Division  
Executive Committee Meeting  
Marriott Wardman Park Hotel  
Washington, DC  
November 2019**



Name	Initial when present
Only those listed below are voting members of your division	
David Griesheimer, Chair	<i>David Griesheimer</i>
Robert Grove, Vice Chair	<i>Robert Grove</i>
Tara Pandya, Secretary	<i>Tara Pandya</i>
Brian Kiedrowski, Treasurer	<i>Brian Kiedrowski</i>
Dmitriy Anistratov, Immediate Past Chair	<i>Anistratov</i>
David Pointer, Board Liaison	
Mathew Cleveland	Travis Trahan is Proxy
Sandra Dulla	<i>SDulla</i>
Han Gyu Joo	
Kendra Long	Travis Trahan is Proxy
Diego Mandelli	
Christopher Perfetti	<i>Chris Perfetti</i>
Katherine Royston	<i>Katherine Royston</i>
Sebastian Schunert	
Travis Trahan	<i>Travis Trahan</i>
<b>Others, please PRINT in</b>	(if there is not enough space, feel free to use the other side)
<b>Name</b>	<b>E-mail</b>
Brendan Kochunas	bkochuna@umich.edu
Xu Wu	xwu27@msu.edu
Andrei Rykhlevskii	andrei2@illinois.edu
PIERO RAVETTO	piero.ravetto@polito.it
Forrest Brown	fbrown@law.gov
Aaron Tumalak	atumulak@umich.edu
Steven Hamilton	hamiltonsp@ornl.gov

Article B10.2 - A quorum for the transaction of business at all Division (or TG) meetings shall consist of fifteen (15) qualified voters or twenty (20) percent of the qualified voters.



Mathematics & Computation Division  
 Executive Committee Meeting  
 Marriott Wardman Park Hotel  
 Washington, DC  
 November 2019



Others, please PRINT in

Name	E-mail
EVAN GONZALEZ	esgonz@ <del>gmail.com</del> umich.edu
BENOIT FORGET	BFORGET@MIT.EDU
Katherine Roustan	roustanke@ornl.gov
Charles Goodman	cegoodma@ncsu.edu
Benjamin Murphy	murbenjamphy@unm.edu
Tara Patel	tpatel.3545@osu.edu
Kathryn Huff	kdhuff@illinois.edu
Mintem Kreher	mkreher13@gmail.com
Bob Groves	grover@ornl.gov
Bill Martin	wrm@umich.edu
Barry Canapel	
Zeyun Wu	
Yousry Azmy	

Article B10.2 - A quorum for the transaction of business at all Division (or TG) meetings shall consist of fifteen (15) qualified voters or twenty (20) percent of the qualified voters.

# Appendix B

## ANS Winter 2019 Meeting MCD Treasurer's Report

### MCD Fund Summary

Current Fund: \$22,402

**2018 Carryover:** \$26,382

### Estimated 2019 Income:

Membership	\$1,272	<b>ANS reduced dues allocation by 50%</b> <b>ANS now takes 75%, leaving MCD with 10%</b>
M&C 2019	\$6,000(?)	
<b>Total:</b>	<b>\$7,272</b>	

### Estimated 2019 Expenses:

Awards	\$1,500	Unplanned \$500 for Young Member Award
Student	\$3,500	
Scholarship	\$3,355	Unplanned \$855 to top-off Gelbard
YPC	\$1,000	
<b>Total:</b>	<b>\$9,355</b>	

**Estimated 2019 Carryover:** \$24,299

### Discussion

- Budget numbers in 2020 have been adjusted so it appears, given the current set of rules by ANS, that the budget is sustainable
- However, changes in ANS rules regarding division income and expenses, as well as how M&C is done, may significantly impact the conclusion
- Currently no estimate on profits from M&C 2019, but first estimates are that expenses were higher than anticipated

### Attachments

- 1) MCD September 30, 2019 Financial Statement from ANS
- 2) Approved budget for 2020 sent to ANS

AMERICAN NUCLEAR SOCIETY  
 Mathematics Computation Division  
 9/30/2019

	Actual	Budget	
	9/30/2019	12/31/2019	Variance
<b>Revenues</b>			
Dues Revenue Allocation	\$948	\$2,388	(\$1,440)
Meeting Revenue		12,952	(12,952)
<b>Total Revenue</b>	<b>948</b>	<b>15,340</b>	<b>(14,392)</b>
<b>Expenditures</b>			
Awards, Plaques	573	1,500	(928)
National Meeting Costs		1,500	(1,500)
Student Support	2,500	3,500	(1,000)
Scholarship & NEED Funding	855	2,500	(1,645)
Other Expenses	1,000		1,000
<b>Total Expenditures</b>	<b>4,928</b>	<b>9,000</b>	<b>(4,072)</b>
<b>Net Surplus/(Deficit)</b>	<b>(3,980)</b>	<b>6,340</b>	<b>(10,320)</b>
<b>Fund Balance at 1/1/19</b>	<b>26,382</b>	<b>26,382</b>	-
<b>Fund Balance at 9/30/19</b>	<b>22,402</b>	<b>32,722</b>	<b>(10,320)</b>

AMERICAN NUCLEAR SOCIETY  
 Mathematics Computation Division  
 9/30/2019

	Actual 9/30/2019	Budget 12/31/2019	Variance
<b>Revenues</b>			
Dues Revenue Allocation:			
MEMBERSHIP DUES ALLOCATION	948	2,388	(1,440)
Total Dues Revenue Allocation	948	2,388	(1,440)
Meeting Revenue:			
		12,952	(12,952)
Total Meeting Revenue		12,952	(12,952)
<b>Total Revenue</b>	<b>948</b>	<b>15,340</b>	<b>(14,392)</b>
<b>Expenditures</b>			
Awards, Plaques:			
ANNUAL MEETING PLAQUES - CROWN TROPHY	73	1,500	(928)
2019 MCD AWARD - RYAN MCCLARREN	500		
Total Awards, Plaques	573	1,500	(928)
National Meeting Costs:			
		1,500	(1,500)
Total National Meeting Costs		1,500	(1,500)
Student Support:			
2019 STUDENT CONFERENCE SPONSOR	2,500	3,500	(1,000)
Total Student Support	2,500	3,500	(1,000)
Scholarship & NEED Funding:			
GELBARD SCHOLARSHIP FUNDING	855	2,500	(1,645)
Total Scholarship & NEED Funding	855	2,500	(1,645)
Other Expenses:			
2019 YOUNG PROFESSIONAL CONGRESS SPONSOR	1,000		1,000
Total Other Expenses	1,000		1,000
<b>Total Expenditures</b>	<b>4,928</b>	<b>9,000</b>	<b>(4,072)</b>
<b>Net Surplus/(Deficit)</b>	<b>(3,980)</b>	<b>6,340</b>	<b>(10,320)</b>

2020 Budget Template for Mathematics & Computation Division				
	2018	2019	2019	2020
	Actual	Budget	Actual through 3/31/2019	Proposed
<b>Balance Forward from Previous Year</b>	\$28,206	\$26,382	\$26,382	\$32,722
<b>Budget Funds</b>				
Member Dues Allocation (\$2/ full dues member; \$1 / reduced dues member)	\$2,388	\$2,388	\$318	\$1,272
Division Income		\$12,952		
<b>Total Income</b>	\$2,388	\$15,340	\$318	\$1,272
<b>Budget Expenses</b>				
Newsletters, Website				
Awards & Plaques	\$65	\$1,500		\$600
National Meeting Costs	\$750	\$1,500		
Topical Meeting Costs				
Division Officer Expenses				
Student Support	\$2,700	\$3,500	\$2,500	\$2,500
Future Activity				
Scholarship/NEED Funding	\$689	\$2,500	\$855	\$2,000
YMG Support				
Other Expenses	\$8		\$1,000	\$500
<b>Total Expenses</b>	\$4,212	\$9,000	\$4,355	\$5,600
<b>Net</b>	<b>(\$1,824)</b>	\$6,340	<b>(\$4,037)</b>	<b>(\$4,328)</b>
<b>Total Year End Funds</b>	\$26,382	\$32,722	\$22,345	\$28,394

# Appendix C

**MCD Executive Committee Meeting  
ANS Winter Meeting, Marriot Wardman Park, Washington DC  
2pm-4pm, 17<sup>th</sup> November 2019**

MCD Standards Committee Report – Paul Hulse

Current standards activity is centred on ANS-10.2 and ANS-10.4 as detailed below.

The current Mathematics and Computation standards cover the design and development of both high integrity and non-safety related software. In particular the following standards are current:

ANS-10.2, “Portability of Scientific and Engineering Software”, which was reaffirmed in 2009. The working group chair is Robert Singleterry. The standard will need a major re-write to remain current and this is not currently possible given the changes that are occurring in software development at this time. Therefore the standard was administratively withdrawn on its 10th anniversary (8/14/19).

ANS-10.4, “Verification and Validation of Non-Safety Related Scientific and Engineering Computer Programs for the Nuclear Industry”, is reaffirmed until 2021. Robin Jones of Southern Nuclear has formed a working group for the update to this standard. Particular focus is being placed on updating the definitions and nomenclature to ensure they are consistent with both modern usage and similar ANS standards. There is no working group meeting scheduled for this week; anyone wishing to be involved in the working group is encouraged to contact Robin directly (RDJONES@southernco.com).

ANS-10.5, “Accommodating User Needs in Scientific and Engineering Computer Software Development”. This was re-affirmed in 2016, the working group chair is Andy Smetana. There is currently no planned activity for this standard, but reaffirmation will be due in 2021.

ANS-10.7, “Non-Real Time, High-Integrity Software for the Nuclear Industry—Developer Requirements”. This was a new standard in 2013 with Charles Martin as working group chair. The standard was re-affirmed in 2018.

ANS-10.8, “Non-Real Time, High-Integrity Software for the Nuclear Industry—User Requirements”. This was a new standard in 2015 with Keith Morrell as working group chair. There is currently no planned activity for this standard, where reaffirmation will be due in 2020.





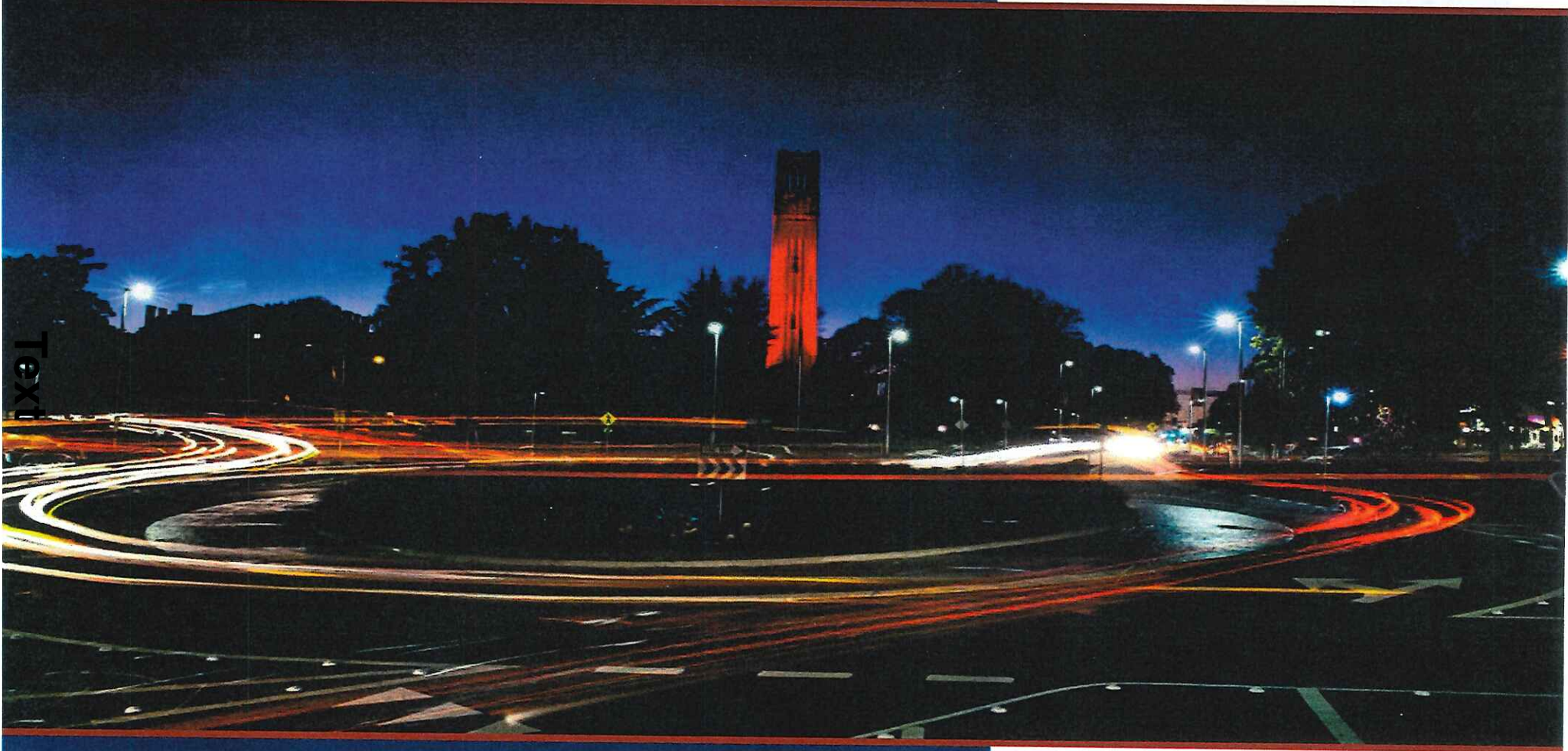
# ANS American Nuclear Society Student Conference 2020

Appendix D

March 26th-28th, 2020

Raleigh Marriott City Center

Raleigh, NC



*ENLIGHTEN | EMBRACE | EMPOWER*

Email: [ans2020studentconference@ncsu.edu](mailto:ans2020studentconference@ncsu.edu)



**American Nuclear Society**  
North Carolina State University



**NC STATE**  
UNIVERSITY

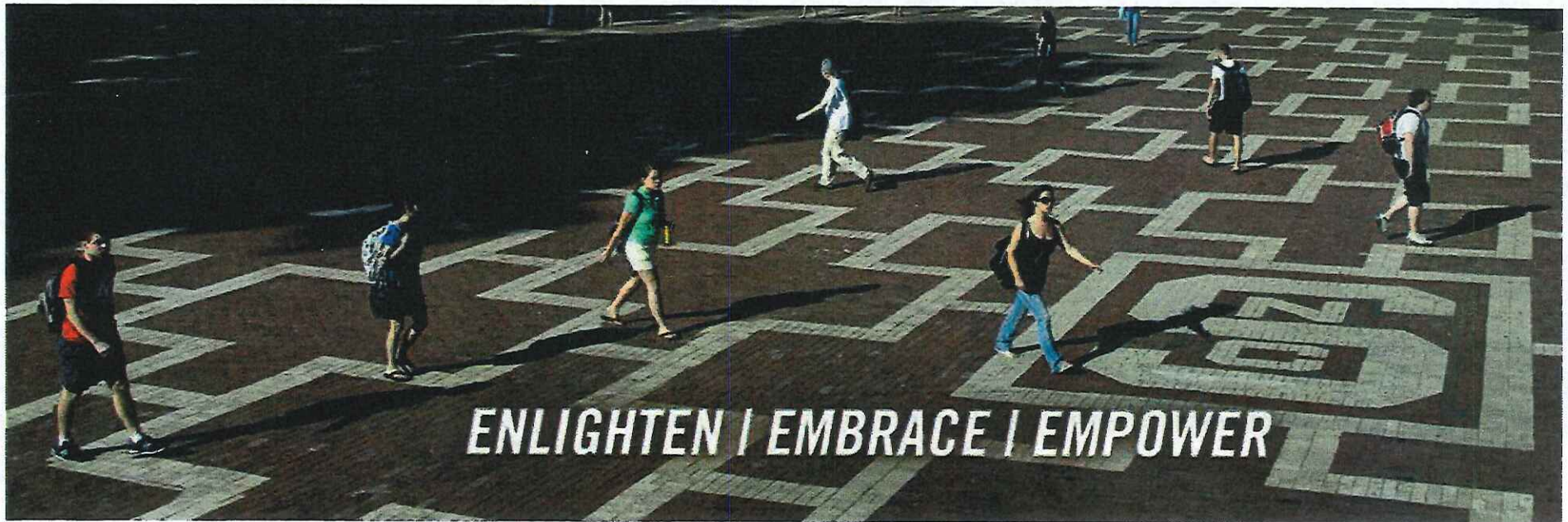
**Nuclear  
Engineering**

**“#1 Online Master of Nuclear Engineering in 2018”**

*- Best College Reviews*

**“#3 Nuclear Engineering Graduate Program in 2019”**

*- US News and World Report*



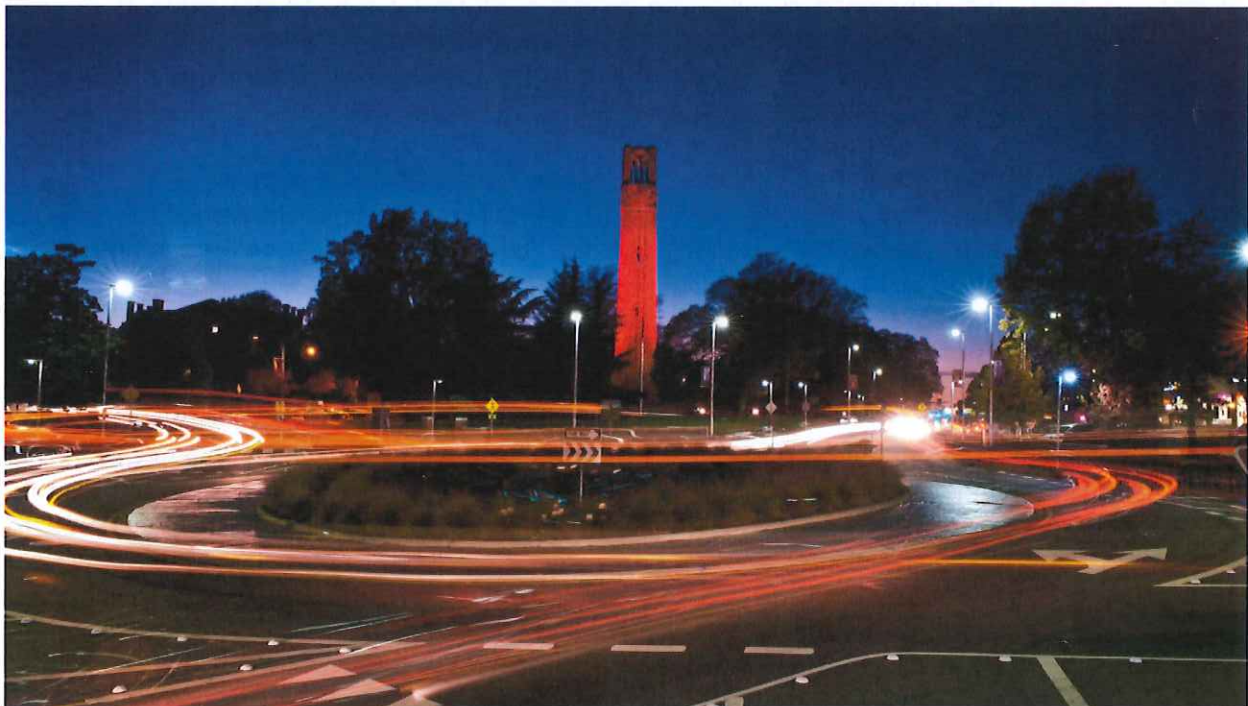


# American Nuclear Society Student Conference 2020

March 26th-28th, 2020

Raleigh Marriot City Center

Raleigh, North Carolina



## ANS Divisions Prospectus

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## Greetings from the 2020 Planning Committee

Dear Division Chair,

We in the Department of Nuclear Engineering and American Nuclear Society at North Carolina State University are eagerly looking forward to March 26<sup>th</sup> - 28<sup>th</sup>, 2020 when we will host students, professionals, and the future leaders in nuclear science and technology at the 2020 ANS Student Conference in Raleigh, North Carolina.

At North Carolina State University, we aim to...

... **ENLIGHTEN** ourselves about nuclear science and technology as we share and contribute to the field. This student conference brings us together to share insight from student and expert researches on theories, applications, and innovations. Nuclear science and engineering is ubiquitous in society – from energy, health, defense, non-proliferation, to name a few. In such a widespread field, this conference provides the perfect platform for experts and students to come together and learn about the various ongoing cutting-edge research in different areas of nuclear science and engineering. In the year 2020, we aim to take stock of what we know, what we still need to know, what opportunities are present, and what the future holds.

... **EMBRACE** nuclear science and technology. As we learn, we must support our industry by contributing knowledge and impacting the next frontiers. We hold tight innovations to advance science and engineering across every existing and new industry that nuclear will transform.

... **EMPOWER** ourselves and others with knowledge and enthusiasm for the impact made by nuclear technologies of the past, present, and future. We will change the “not in my backyard” mantra to one of “in my backyard” because of the benefits it provides to societies near and far.

This theme allows us to see our collective role in active learning, living, and sharing of the science engineering and technologies associated with nuclear energy, health physics, and plasmas for the life sciences, nuclear non-proliferation, nuclear materials, nuclear computational science, reactor engineering, and nuclear waste management to name a few broad areas. It also arms us with information to share with students and the larger public about the benefits we receive from nuclear science and engineering. We’re nuclear engineers, we’re innovators, and we’re ambassadors for the continued use of an awesome technology in our backyards!

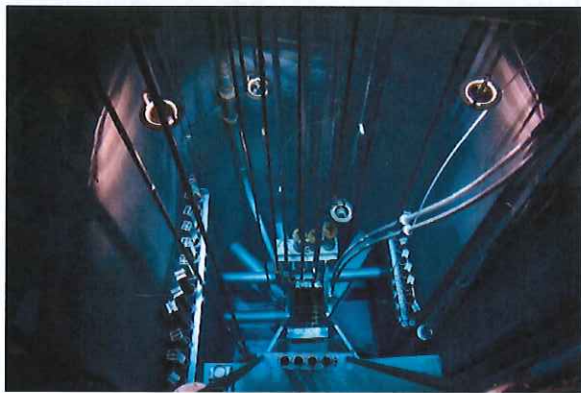
NC State’s nuclear program will be 70 years old in the year 2020; which, further emphasizes the significance of hosting the ANS Student Conference on-campus to help celebrate this milestone. We enlighten ourselves with our history, embrace our present and empower ourselves as we move ahead.

We ask you to review our sponsorship and exhibitor packages to determine if any options fit your organization's needs to Enlighten, Embrace, and Empower the next generation of nuclear science and technology leaders. We look forward to working with our sponsors and exhibitors to make the 2020 ANS Student Conference the best in the department's history!

Sincerely,

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Ishita Trivedi  
Graduate Chair



**“#1 Online Master of Nuclear Engineering in 2018”**  
*- Best College Reviews*

**“#3 Nuclear Engineering Graduate Program in 2019”**  
*- US News and World Report*



### □ ANS Division Option #1 (\$5,000)

- Recognized as contributing general support for conference:
- Lunch and Learn sponsor with speaker
- Best Paper Awards in associated track
- Sponsor for associated technical sessions
- Recognition as sponsor across conference media

### □ ANS Division Option #2 (\$2,500)

- Recognized as contributing sponsor to conference social:
- Best Paper Awards in associated track
- Sponsor for associated technical sessions
- Recognition as sponsor across conference media

### □ ANS Division Option #3 (\$1,000)

- Recognized as contributing general support for conference:
- Best Paper Awards in associated track
- Recognition as sponsor across conference media

In addition to the package, our organizing team requests the following:

- Paper Reviewers (January and February 2020)
  - Name, email, and area of expertise
  
- Poster Session Judges (day of conference)
  - Name, email, and area of expertise
  
- Technical Presentation Judges (day of conference)
  - Name, email, and area of expertise