

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

Sunday, June 9, 2019 – 2:00-4:00 pm
Lakeshore B, Hyatt Regency, Minneapolis, MN

I. Call to Order, Attendance, Introductions

- **Dimitry Anistratov called the meeting to order at 2 pm.**
- **The attendance sheet was passed around and is attached as Attachment A. We had 8 members of the EC (including officers) present with 2 members having 1 proxy each. 7 other members of MCD were also present.**
- **Everyone introduced themselves around the meeting table.**

II. Officer Reports

a. Secretary: Tara Pandya

i. Approval of minutes from 2018 Winter Meeting in Orlando, FL

The committee voted electronically to approve the 2018 winter meeting minutes. They were approved on January 7, 2019 with 12 yes, 1 abstain, 2 no replies.

ii. Approval of agenda

Dave Griesheimer motioned to approve the agenda and Brian Kiedrowski seconded. The agenda was unanimously approved.

b. Treasurer's Report: Brian Kiedrowski (combined with the Finance committee report)

Brian presented the budget for MCD and reported that there is a reduction of membership dues income (attached as Attachment B). He retroactively reduced the share to the M&C organizers from 50% to 25%, which led to a corresponding reduction of MCD income of 25% to 10% of profits from the topical. Brian will prepare a detailed budget projection to make decisions on what cuts needed to be made for the next few years.

A report on finances from the board liaison Dave Pointer was then given. Dave P. reported several items related to ANS national and decisions related to solvency that impact MCD. These items were the following:

- **The reduction in dues allocation to divisions was necessary as a short-term measure to provide some additional funding. On the current trajectory, ANS National has until about 2022 to make serious changes to remain solvent.**
- **Dave suggested that MCD provide clear guidance to ANS National about what it and its members can have value from of the society. He and Todd Palmer can help communicate recommendations to the Board.**

- **Costs for executing national meetings have skyrocketed in recent years, despite participation being up. This fact along with falling revenue has led to financial issues.**
- **ANS National currently does not have liquidity in its funding because much of the money is currently in budgets they cannot access. This may lead to fundamental changes in the funding model of divisions and local sections.**
- **Student travel support for national meetings appears to have low payoff except for encouraging student leaders. Student travel support for topicals appears to be effective.**
- **It is important to provide feedback to ANS National on impact of cuts with suggestions for how to better provide value.**

Discussion on Dave P. report ensued. Travis Trahan said there needs to be a lot more transparency from national. Dave G. suggested that we need MCD and research-focused interests as value to members. Bob Grove said we need to rethink the way we do business. Finally, Dimitry suggested we survey the MCD members and Dave P. suggested a poll on this topic.

- c. Vice-Chair – Roundtable: David Griesheimer
This was discussed during the Program Committee report in item IV.
- d. Chair: Dimitry Anistratov
- i. President's Meeting with Professional Division and Committee Chairs report
Dimitry reported the following:
 - **National wants to have centralized finances where the division has to submit requests for money with them instead of handling our own finances.**
 - **There will be a meeting of the Board of Governors on Thursday to discuss the various new measures put forth and MCD needs to have some representation. Bob Grove and Miriam volunteered to represent us.**
 - **MCD will not have any representation on the Board starting after this year. Apparently chairs were asked to suggest people from their divisions for this past year but none of the MCD people suggested were accepted for nomination. We need to be sure MCD has some representation on the board going forward.**
 - **National is planning to change the structure of their committees and the representation model.**
 - ii. Class IV sponsorship of SNA-MC-2020
On January 28, 2019 Tara motioned electronically that MCD sponsor SNA+MC 2020 as a Class IV and Dimitry seconded. The motion was approved electronically on February 1, 2018 with 9 yes and 6 no replies.

- iii. The Young Professionals Congress (YPC) 2019, sponsorship
On January 25, 2019 Dima motioned electronically to contribute \$1000 to YPC 2019 and Brian seconded. The motion was approved electronically on January 26, 2019 with 11 yes, 1 no, 4 no replies.

III. Standing Committees

- a. Benchmark: Chris Perfetti and Sebastian Schunert
Sebastian was not in attendance so Chris gave an update. Sebastian has been working on a compilation but nothing complete yet. Chris has a student at UNM working on research related to benchmarks. Dave suggested we try to get a comprehensive list of benchmarks and associated publications on the GitHub site. Ryan suggested uploading a CSV file to the GitHub site with analytical solutions for ease of comparing to numerical results. Dima suggested we put a link to the GitHub site on our MCD website.
- b. Finance: Brian Kiedrowski
Brian covered everything needed during the Treasurer's report discussion.
- c. Honors and Awards: Piero Ravetto
 - i. 2019 Pomraning and Young Member's Research Achievement (YMRA) awards
On March 21, 2019 Dima motioned electronically to make the YMRA award in the amount of \$500 for 2019 and Brian seconded. The motion was approved electronically on March 23, 2019 with 11 yes, 1 abstain, 4 no replies.

Piero announced that the YMRA award went to Ryan McClarren and the Pomraning award went to Farzad. Dimitry got plaques and these will be given out at M&C 2019 in September.

Piero reminded us that the Pomraning winner usually gives a plenary at M&C and the YMRA winner gives a special talk. Todd Palmer is working on scheduling both of these at M&C 2019.

Dave mentioned that we need to be active in getting nominations for the Pomraning, YMRA, and Service awards. Piero said there was only 1 nominee for the Pomraning and 3 nominees for the YMRA.

Piero suggested to put up the past winners on the ANS MCD website. These are on the regular ANS website so action item for Tara to include these names on our website.

- ii. YMRA award procedure
We need to formalize the YMRA, Pomraning, and Service award writeups that are on the MCD website. These are given every 2 years. Action item

for Tara is to update these writeups using the current writeups and the flyer put together last year (Miriam sent electronically). Action item for Piero and Dimitry to look through their email exchanges with national on who we need to email about the updated writeups.

Dimitry motioned to make the YMRA award biannually in the amount of \$500. Dave seconded. The motion passed unanimously.

Other awards discussion included the distinguished service award. Dave motioned to award the Distinguished Service Award in the amount of \$500 biannually. This was seconded by Brian and was approved unanimously.

We also confirmed that this award requires a Past MCD Chair on the nomination (Dave was right about this fact).

d. Standards: Paul Hulse

Paul Hulse was not in attendance and no written report was submitted

e. Membership: TBD

Dave Griesheimer gave a quick update on the membership report received from Valerie on March 11, 2019 covering MCD membership as of December 31, 2018. (attached as Attachment C)

IV. Program Committee Report: Steven Hamilton and Jeffery Densmore

a. Update on technical program for this conference

Steven was not able to attend the program committee meeting but gave a quick report. Thanks for Jeff Densmore who has completed his tenure as TPC. The new assistant TPC will be Brian Kiedrowski. The best paper award from the 2018 winter meeting will be signed by Dima and given to Forrest to give to Colin. We only have 2 regular sessions at this conference and they are both on Tuesday. The roundtable is Monday afternoon about ECP. Judy Hill could not make it. At the 2019 winter meeting we are planning to have a separate panel session from the usual computational roundtable. Bob and Travis will decide if they want to combine. Finally, we always need more reviewers so let Steven know of any recent graduates or other co-workers who would like to be added to the list.

b. Update on M&C 2019, Portland, OR

Since Steven was not able to attend the program committee meeting, Dimitry gave the update. Todd said everything is looking really good and they have a lot of papers. The over 400 summary submissions are down to 280 accepted summaries. The process of reviewing the full papers has been a big burden and should be reconsidered for future topicals. The plenaries are being planned and they received final approval from the NPC today. The decision to do a special journal issue of NSE has not been finalized. See the attached slides presented from the program committee meeting as Attachment D.

- c. Update on M&C 2021, Raleigh, NC

Since Steven was not able to attend the program committee meeting, Dimitry gave the update. They have received calendar placement and the website will be up in June. The preliminary publication plan has been approved and Patrick Brantley will be the publication chair. The summaries and paper will all be published online. A hotel contract still needs to be signed and populating the organizing committee is ongoing. Youzry will come up with a proposal to give to the MCD EC about the plan for splitting the 25% of profits between the division and host sections.

This led to a discussion about embedding our future M&C meetings with the national meetings. A document from the board was sent with the criteria for a topical meeting to stay standalone. Dave said that M&C barely meets the criteria.

The board has also come up with the idea of a Supertopical meeting that combines several topical meetings at the same location and may replace one of the national meetings.

- V. 2020 ANS Student Conference, Raleigh, NC (2:30 pm)

- a. Update from the organizing committee: Jonathan Crozier, NCSU

Jonathan Crozier gave an update about the 2020 student conference. It will showcase the PULSTAR reactor at NCSU with a student experience geared toward exposing them to career opportunities. They are excited to partner with MCD and currently have 2 socials planned (an Italian restaurant and the science museum). They plan to have several workshops including one on MCNP and one on COBRA-TF. MCD typically gives \$2500 for general support and some amount for a best paper award. We will discuss this further when Brian has come up with a detailed budget. Handout from this presentation is attached as Attachment E.

- b. Update from the 2019 ANS student conference at VCU was given by Daniel Tincher. Thanks to MCD for being supportive financially and with the review process. The conference had 500 attendees, 110 presentations, and 200 posters. There was also an outreach event for local middle and high school students and a Monte Carlo casino night. Other highlights included 3 MCD sessions with \$2,350 of support from MCD and a \$150 best paper award. The best paper awards went to Emily Vu and Grant Schumack (not sure of this spelling).

- VI. MCD Scholarships: David Griesheimer

- a. Update

Dave and Piero recapped the scholarship winners were Kalin Kiesling for the Gelbard and Colby Sorrel for the Dannels. There were 10 applications for the Gelbard and 4 for the Dannels. Gelbard is still underfunded but we will need to

see how the stock market does and how the detailed budget for the next few years falls out.

VII. Adjourn

Dave Griesheimer moved to adjourn and Dimitry Anistratov seconded. The motion was approved unanimously and the meeting was adjourned at 5 pm.

**Mathematics & Computation Division
Executive Committee Meeting
Hyatt Regency Minneapolis Hotel
Minneapolis, MN
June 2019**

ATTACHMENT A



| Name | Initial when present |
|-------------------------------------------------------------|-----------------------------------------------------------------|
| Only those listed below are voting members of your division | |
| Dmitriy Anistratov, Chair | DYA |
| David Griesheimer, Vice Chair | DG |
| Tara Pandya, Secretary | Tara Pandya |
| Brian Kiedrowski, Treasurer | BCK |
| Rachel Slaybaugh, Immediate Past Chair | |
| David Pointer, Board Liaison | WPA |
| Mathew Cleveland (Proxy to Travis) | |
| Benoit Forget | |
| Barry Ganapol | |
| Han Gyu Joo | |
| Diego Mandelli | |
| Ryan McClarren | Ryan McClarren |
| Christopher Perfetti | Chris |
| Sebastian Schunert (Proxy to Chris) | |
| Travis Trahan | TT |
| Jonathan Walsh | |
| Others, please PRINT in | (if there is not enough space, feel free to use the other side) |
| Name | E-mail |
| Brian Franke | bcf Frank@gandia.gov |
| Piero Ravetto | piero.ravetto@polito.it |
| Bob Grover | grover@ornl.gov |
| MADICKEN MUNK | mmunk2@illinois.edu |
| ANIL K. PRINJA | PRINJA@UNM.EDU |
| MIRIAM KREHER | mkreher13@gmail.com |
| 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.

ATTACHMENT B

ANS Annual 2019 Meeting MCD Treasurer's Report

MCD Fund Summary

Current Fund: \$21,845

2018 Carryover: \$26,382

Estimated Income:

| | | |
|---------------|----------------|---------------------------------------------------------------------------------------------|
| Membership | \$1,272 | ANS reduced dues allocation by 50% ANS now takes 75%, leaving MCD with 10% |
| M&C 2019 | \$6,000 | |
| Total: | \$7,272 | |

Expected 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 | |
| Total: | \$9,355 | |

Estimated 2019 Carryover: \$24,299

Conclusions

- MCD fund is currently fine, but there are significant shortfalls in future years because of large reductions in distributions to MCD
- Expected average estimated income for future years is about **\$4,200 per year**
 - Assume \$1,200 per year from membership and $\$6,000/2 = \$3,000$ per year from M&C
 - This assumes no further cuts by ANS, which are still possible
 - M&C income is also uncertain, especially in the long term
- **Need to discuss possible reductions in expenses to maintain sustainability**

Attachments

- 1) MCD March 31, 2019 Financial Statement from ANS
- 2) Draft budget for 2020

AMERICAN NUCLEAR SOCIETY
 Mathematics Computation Division
 3/31/2019

| | Actual | Budget | |
|--------------------------------|----------------|---------------|-----------------|
| | 3/31/2019 | 12/31/2019 | Variance |
| Revenues | | | |
| Dues Revenue Allocation | \$318 | \$2,388 | (\$2,070) |
| Meeting Revenue | | 12,952 | (12,952) |
| Total Revenue | 318 | 15,340 | (15,022) |
| Expenditures | | | |
| Awards, Plaques | | 1,500 | (1,500) |
| 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 |
| Total Expenditures | 4,355 | 9,000 | (4,645) |
| Net Surplus/(Deficit) | (4,037) | 6,340 | (10,377) |
| Fund Balance at 1/1/19 | 26,382 | 26,382 | - |
| Fund Balance at 3/31/19 | 22,345 | 32,722 | (10,377) |

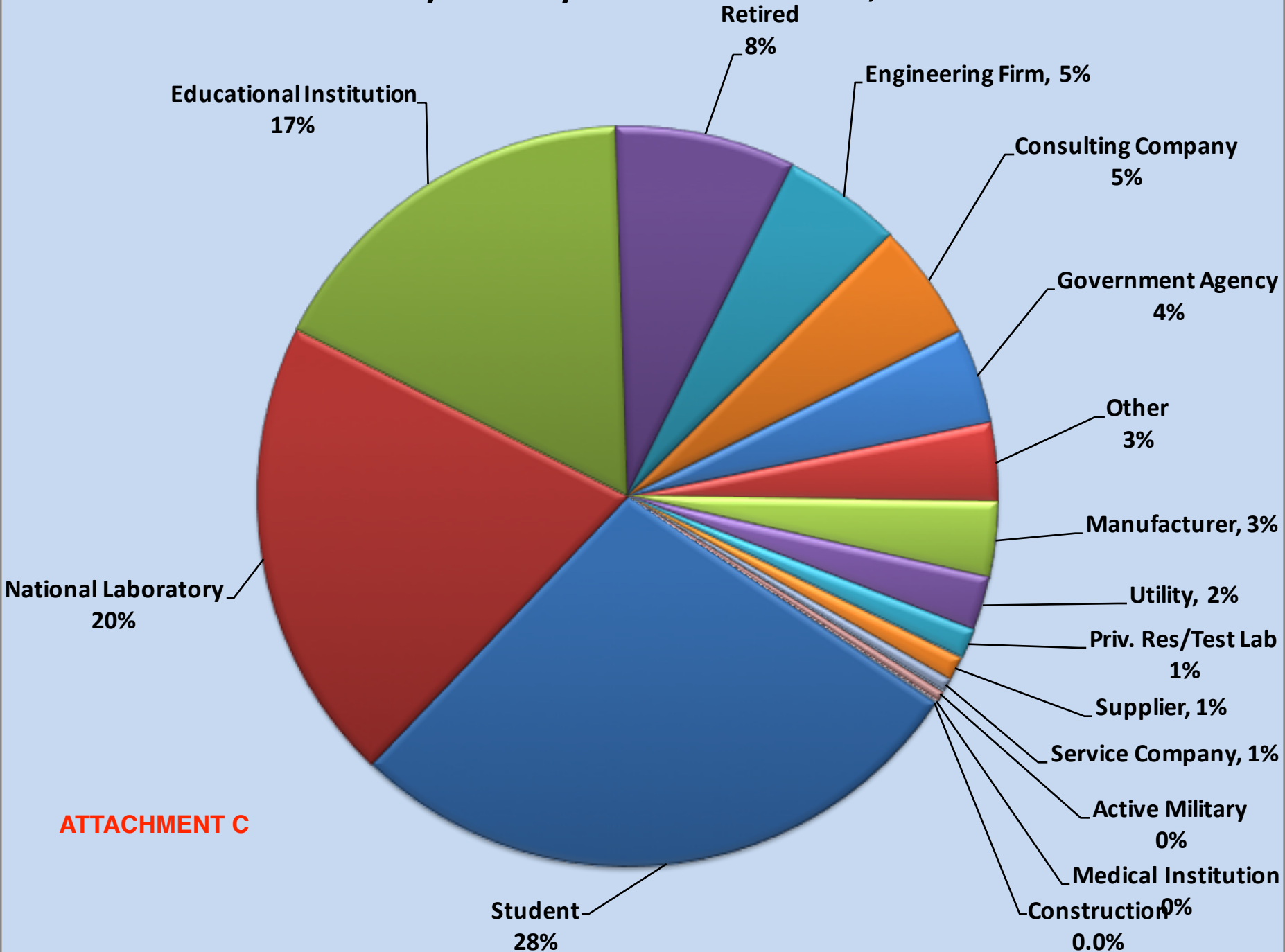
AMERICAN NUCLEAR SOCIETY
 Mathematics Computation Division
 3/31/2019

| | <u>Actual</u> 3/31/2019 | <u>Budget</u> 12/31/2019 | Variance |
|-------------------------------------------------------------|----------------------------|-----------------------------|-----------------|
| Revenues | | | |
| Dues Revenue Allocation: MEMBERSHIP DUES ALLOCATION | 318 | 2,388 | (2,070) |
| Total Dues Revenue Allocation | <u>318</u> | <u>2,388</u> | <u>(2,070)</u> |
| Meeting Revenue: | | 12,952 | (12,952) |
| Total Meeting Revenue | | <u>12,952</u> | <u>(12,952)</u> |
| Total Revenue | 318 | 15,340 | (15,022) |
| Expenditures | | | |
| Awards, Plaques: | | 1,500 | (1,500) |
| Total Awards, Plaques | | <u>1,500</u> | <u>(1,500)</u> |
| National Meeting Costs: | | 1,500 | (1,500) |
| Total National Meeting Costs | | <u>1,500</u> | <u>(1,500)</u> |
| Student Support: 2019 STUDENT CONFERENCE SPONSOR | 2,500 | 3,500 | (1,000) |
| Total Student Support | <u>2,500</u> | <u>3,500</u> | <u>(1,000)</u> |
| Scholarship & NEED Funding: GELBARD SCHOLARSHIP FUNDING | 855 | 2,500 | (1,645) |
| Total Scholarship & NEED Funding | <u>855</u> | <u>2,500</u> | <u>(1,645)</u> |
| Other Expenses: 2019 YOUNG PROFESSIONAL CONGRESS SPONSOR | 1,000 | | 1,000 |
| Total Other Expenses | <u>1,000</u> | | <u>1,000</u> |
| Total Expenditures | 4,355 | 9,000 | (4,645) |
| Net Surplus/(Deficit) | (4,037) | 6,340 | (10,377) |

| 2020 Budget Template for Mathematics & Computation Division | | | | | |
|---------------------------------------------------------------------------|-----------|----------|------------------------|-------------------|------------------|
| | 2018 | 2019 | 2019 | 2019 | 2020 |
| | Actual | Budget | Actual through 5/31/19 | Estimate year-end | Proposed (DRAFT) |
| Balance Forward from Previous Year | \$28,206 | \$26,382 | \$26,382 | \$26,382 | \$24,299.00 |
| Budget Funds | | | | | |
| Member Dues Allocation (\$2/ full dues member; \$1 / reduced dues member) | \$2,388 | \$2,388 | \$318 | \$1,272 | \$1,272 |
| Division Income | | \$12,952 | | \$6,000 | |
| Total Income | \$2,388 | \$15,340 | \$318 | \$7,272 | \$1,272 |
| Budget Expenses | | | | | |
| Newsletters, Website | | | | | |
| Awards & Plaques | \$65 | \$1,500 | \$500 | \$1,500 | \$1,500 |
| National Meeting Costs | \$750 | \$1,500 | | | |
| Topical Meeting Costs | | | | | |
| Division Officer Expenses | | | | | |
| Student Support | \$2,700 | \$3,500 | \$2,500 | \$3,500 | \$3,500 |
| Future Activity | | | | | |
| Scholarship/NEED Funding | \$689 | \$2,500 | \$855 | \$3,355 | \$2,500 |
| YMG Support | | | | | |
| Other Expenses | \$8 | | \$1,000 | \$1,000 | |
| Total Expenses | \$4,212 | \$9,000 | \$4,855 | \$9,355 | \$7,500 |
| Net | (\$1,824) | \$6,340 | (\$4,537) | (\$2,083) | (\$6,228) |
| Total Year End Funds | \$26,382 | \$32,722 | \$21,845 | \$24,299 | \$18,071 |

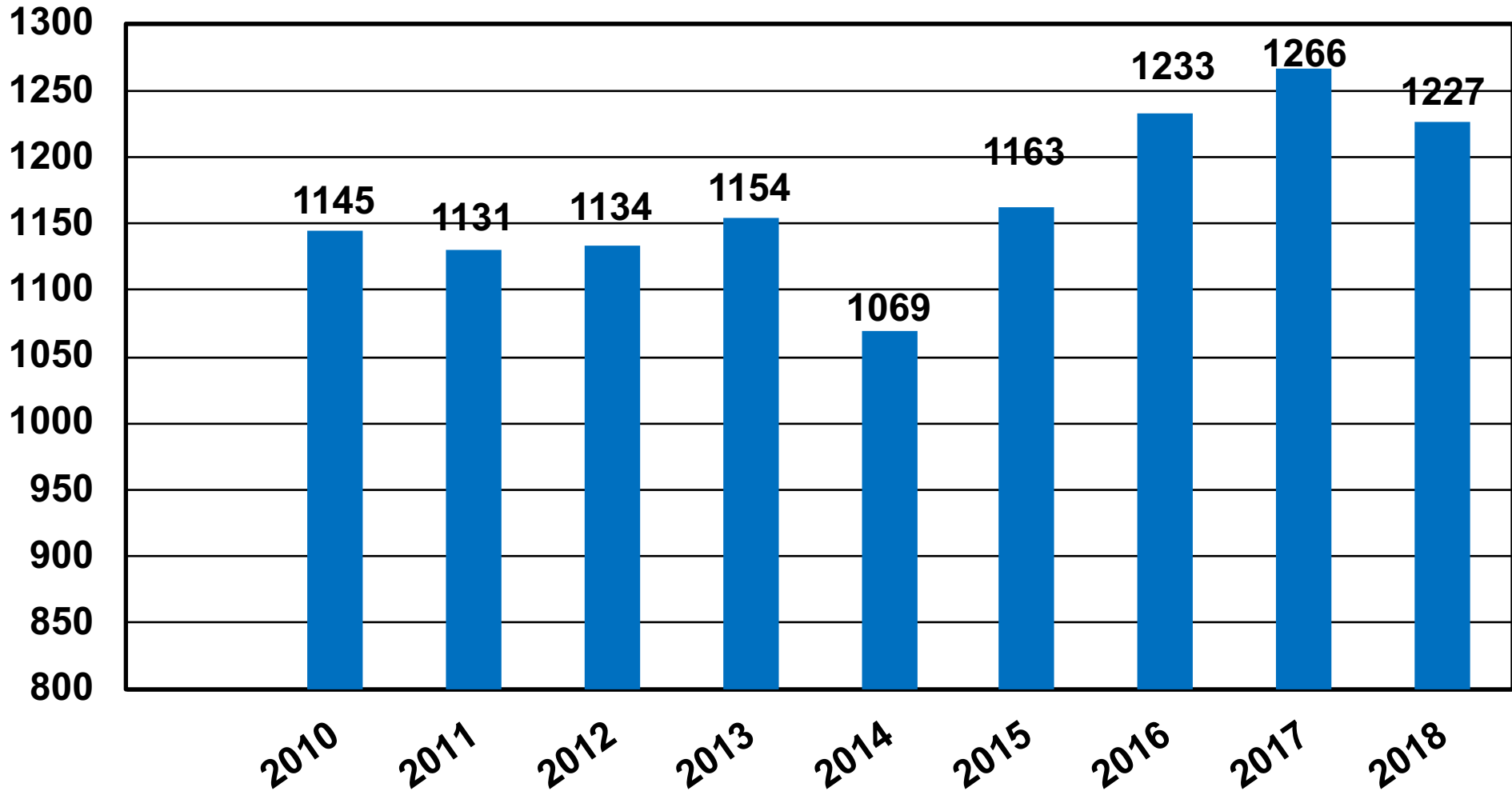
Mathematics & Computation Division

Division by Industry as of December 31, 2018

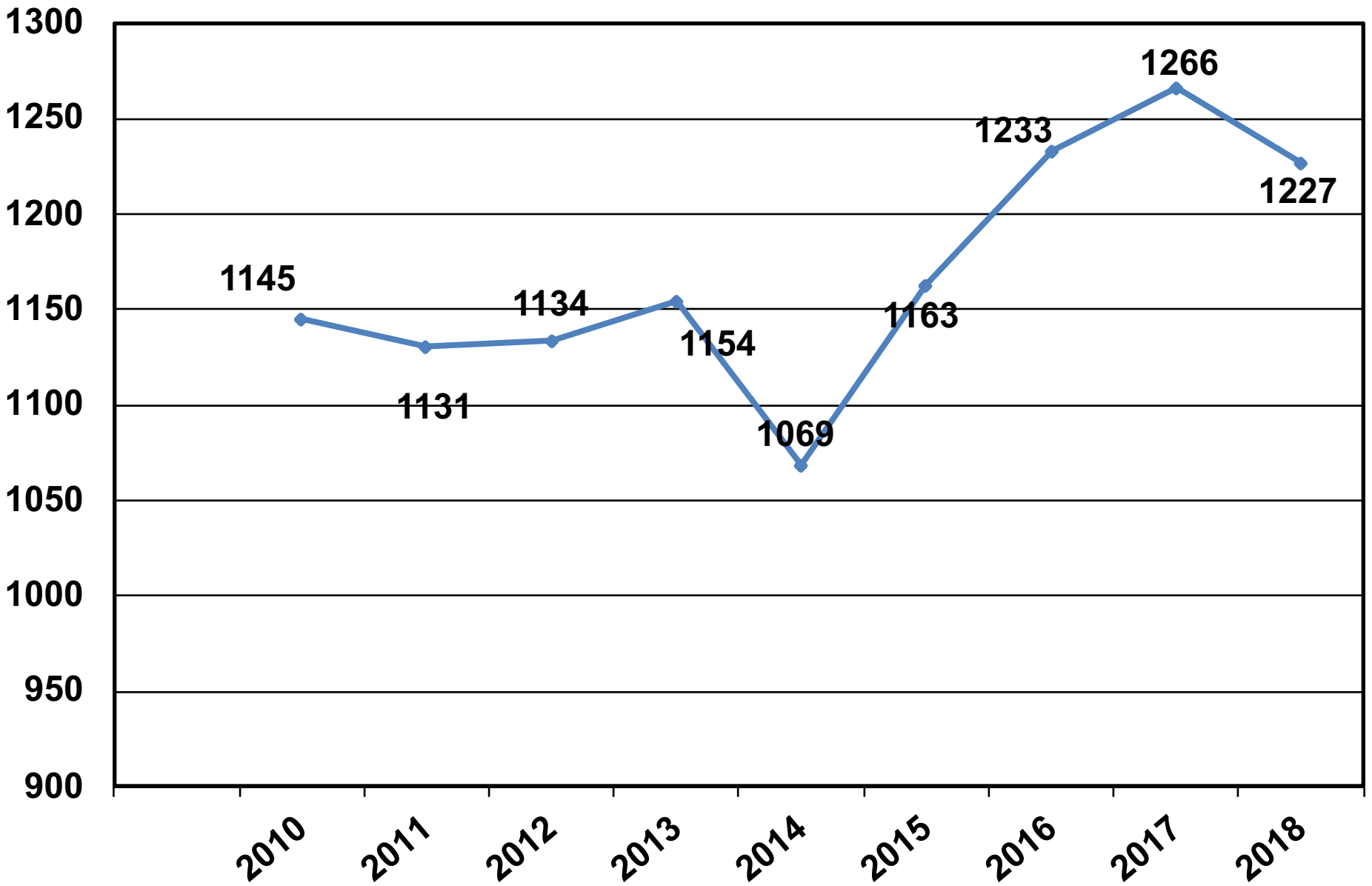


ATTACHMENT C

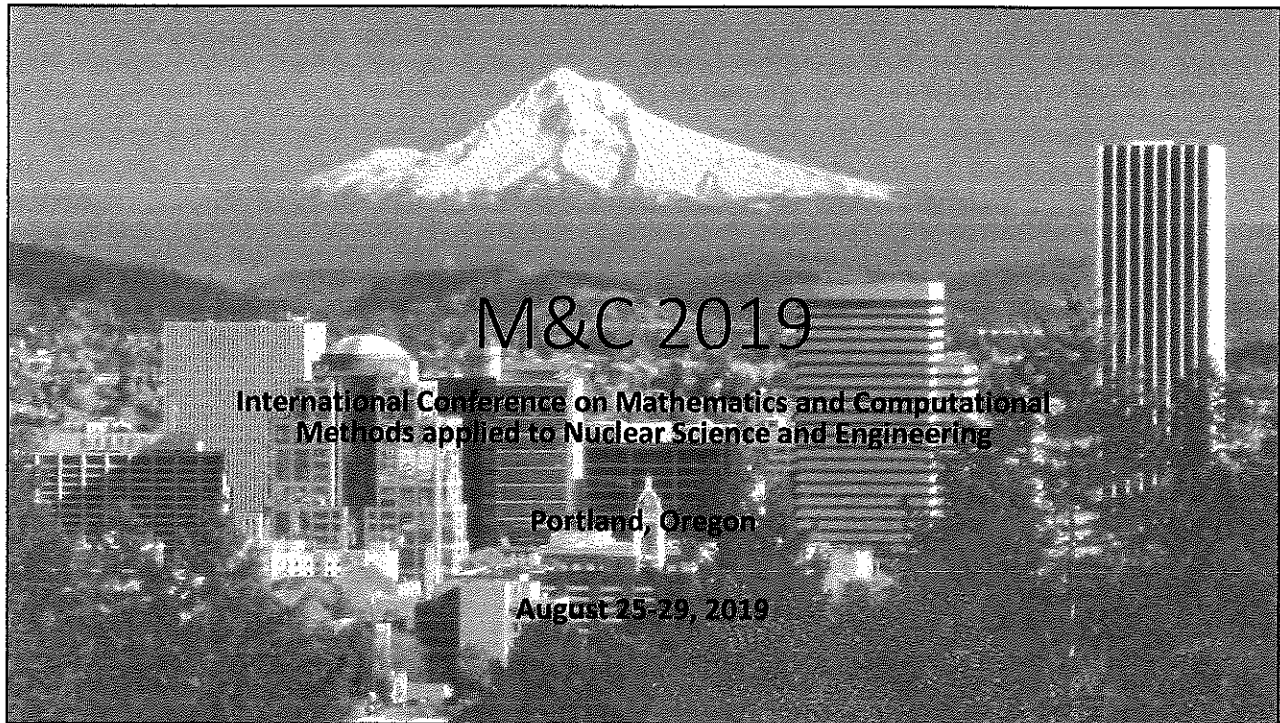
Mathematics & Computation Division
Annual Membership



Mathematics & Computation Division Annual Membership



ATTACHMENT D



Meeting Information (Checklist from NPC Meeting workshop)



- | | |
|--------------------------------------------------------------------------------|--------------|
| • Session Titles and Outlines of Technical Content | Not complete |
| • Names of Session Chairs and Indicated Degree of Commitment Obtained | Not Complete |
| • Invited Speakers Commitment (i.e. Plenary Speakers) | Not Complete |
| • Final Membership Listing of Technical Program Committee | Complete |
| • Updated Meeting Time Schedule | Complete |
| • Pertinent details regarding any special events, tours and hotel arrangements | Complete |

Overview of Meeting Program



- Day 1 (August 25, 2019)
 - Workshop 1: Barry Ganapol (University of Arizona) Details complete
 - Workshop 2: Kyle Niemeyer (Oregon State University) Details complete
 - Registration (ANS/IANS) Details complete
 - Welcome Reception Menu and venue details complete

Overview of Meeting Program



- Day 2 (August 26, 2019)
 - Opening Ceremony and Plenary –I Speaker and venue details complete
 - Coffee Break Menu and venue details complete
 - Opening Plenary –II Speaker and venue details complete
 - Lunch In town
 - Technical Session 1 Venue details complete
 - Coffee Break Menu and venue details complete
 - Technical Session 2 Venue details complete
 - Poster session Menu and venue details complete (beer tasting/light appetizers)
 - Dinner In town

Overview of Meeting Program



• Day 3 (August 27, 2019)

- Technical Session 3
- Coffee Break
- Technical Session 4
- Lunch
- Technical Session 5
- Coffee Break
- Technical Session 6
- Gelbard Scholarship Fundraiser
(Crystal Dolphin Dinner Cruise)

Venue details complete
 Menu and venue details complete
 Venue details complete
 Venue details complete
 Venue details complete
 Menu and venue details complete
 Venue details complete
 Menu and venue details complete

Overview of Meeting Program



• Day 4 (August 27, 2019)

- Technical Session 7
- Coffee Break
- Technical Session 8
- Lunch
- Technical Session 9
- Coffee Break
- Technical Session 10
- Banquet at hotel

Venue details complete
 Menu and venue details complete
 Venue details complete
 In town
 Venue details complete
 Menu and venue details complete
 Venue details complete
 Menu and venue details complete

Overview of Meeting Program



- Day 5 (August 28, 2019)
 - Technical Session 11
 - Coffee Break
 - Technical Session 12

Venue details complete
 Menu and venue details complete
 Venue details complete

Meeting by the Numbers



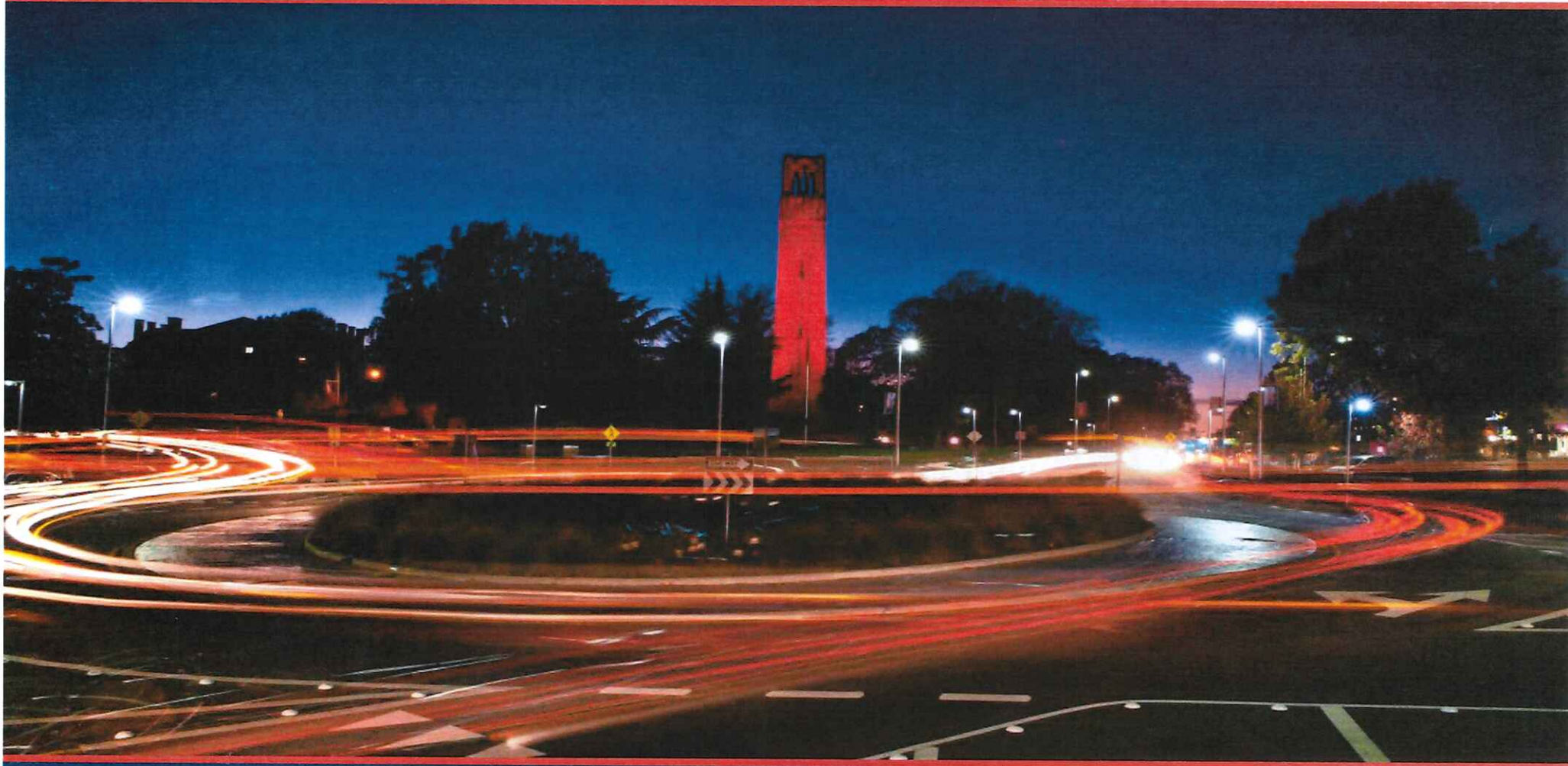
- Abstracts
 - Total: 407
 - Invited for Full Paper: 317 (18 + 299)
 - Rejected: 90
- Full Papers
 - Total: 285-288
 - Accepted: 161
 - Accepted with Revisions: 112
 - Rejected unless Revised: 15
- Expected result
 - 252 Oral Presentations
 - 33-36 Posters
- Registrants
 - Expected: 350
 - Present: 24+3
- Donations
 - Expected: 25K
 - Present: 32.3K

ATTACHMENT E



ANS American Nuclear Society Student Conference 2020

April 2 – 4, 2020
Raleigh, NC



ENLIGHTEN | EMBRACE | EMPOWER

Email: 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

