The AoCMM Competition Rules

The Competition will begin at Tuesday, October 4, 2016, 12:00:00 AM and end at Tuesday, October 18, 2016, 11:59:59 PM.
Note: Pacific Standard Time (PST)

Contest Registration

1. A team consists of 1 to 4 contestants all below the age of **20**. A team can consist of contestants from different schools and geographic regions.
2. Registration for the 2016 competition ends on Sunday, October 2, 2016, 11:59:59 PM (PST). Registrations submitted after will be considered invalid, and the team will not be able to participate in this year's competition, which is why teams are recommended to register well in advance.
3. Any failure to provide the names, emails, and/or school(s) of team members will result in nullification of the registration. Any failure to provide $5 registration fee on the website will also result in nullification. Note: All of the information that you provide will be used for statistical purposes only and will have no impact on your results, and will not be released to any third party.
4. After registration and payment, teams will receive confirmation emails within 48 hours of acceptance to the competition. These emails will contain a ***control number*** that must be labelled correctly on solution papers. Failure to do so will result in nullification of entries, and disqualification from the competition.

Viewing the Problem

1. Contest problems will be available on our official website (*http://www.aocmm.org/*) at the start of the competition (Tuesday, October 4, 2016).
2. Competitors must complete ***TWO*** of the two problems given.
3. Each member of the team will also receive the problems via email, from our official email accounts, *aocmm_competition@126.com* and *aocmm.competition@gmail.com* on Tuesday, October 4, 2016, 12:00:00 AM.

Contest Rules

1. During the contest teams will not be allowed to communicate with each other or work together to solve problems. Teams are expected to complete the competition using only their own research and capabilities. Teams are not allowed to discuss problems with others, and are not allowed to receive any outside help, from anyone, to complete this competition. Failure to comply with these rules above will result in immediate disqualification.
2. Teams may utilize any sources online and in paper form as long as they are properly cited within the solution paper.

Note: Plagiarism is not allowed and will result in disqualification of the team.

3. Teams are not allowed to discuss their solutions, until after solutions are revealed on our official website. (*http://www.aocmm.org*)

Paper Formatting Requirements

1. All solution papers must be typed in English. Grammar and Mechanics do not have to be perfect, but if the judges cannot understand an explanation, it will be reflected in your score.
2. Papers must be typed in Times New Roman, 12 point font.
3. Each solution paper must be clearly labeled with the control number, at the top left corner of the page, and page number, at the top right number of the page. Example:

#Control_Number *#Page_Number*

4. All equations used should be properly formatted, with one equation per line. Appropriate equation editors in word processing software are to be used. Equations are to be numbered sequentially throughout the paper for the reader's reference.
5. Graphs have to be clearly labeled and easily identified.
6. All code must be clearly identifiable as code - this means you should use a font appropriate for code segments.
7. Your solution paper for both problems should NOT exceed than ***35*** pages (excluding Appendix)! Judges will not be responsible for reading beyond the maximum length.
8. *A summary that is no longer than* ***one*** *page is required for each competition problem.* Effective summaries should not only interpret the contest problem but provide any important conclusions derived from the team's mathematical model and a brief overview of the methods employed and techniques used to arrive at your results.
9. It is recommended that the solution paper be organized in the following format:
    a. Title Page (title of paper, control number, etc.)
    b. Summary
    c. Table of Contents
    d. Introduction
    e. Model (for each problem)
        i. Introduction of the model
        ii. Assumptions and Justifications
        iii. Clear explanation of solution
        iv. Sensitivity Analysis
        v. Strengths and Weaknesses
    f. Any additional parts teams deem necessary to their paper
    g. Citations
    h. Appendix -- Code for your models should go here.

Note: Only include the most integral parts of your code in the appendix.

Paper Submission

1. Papers must be submitted electronically by Tuesday, October 18, 2016, 11:59:59 PM (PST) by one of the members using the email he/she submitted during registration to ***both*** of the following emails:

aocmm.competition@gmail.com *aocmm_competition@126.com*

Failure to do so will prevent the team from completing their submission properly.

Note that hardcopies of solution papers are NOT required for this competition.

2. Email that contains your submission should be in the following format.

Header: AoCMM 2016 – *YourControlNumber*

Your paper must be in PDF version. AoCMM will not be responsible for any graph or formula that cannot be seen.

3. The latest version of the email received will be used for the judging process. You may NOT send more than five submissions!

4. After the contest is over, AoCMM will then begin the judging process and results will be released by Sunday December 25, 2016 on our website and will be emailed to each team member's email address.

5. All teams will receive an electronic certificate. If paid a $8 shipping and handling fee at the time of registration, one official signed certificate will be printed and shipped for each participant.

Top 1% of all teams will be awarded Grand Prize of over $200, top 3% get Alpha Prize of over $50, top 8% will receive Beta Prize, gift cards from our selected sponsors, and top 15% will be awarded Gamma Prize.

Please contact us for details regarding how to claim these rewards before Monday January 30, 2017, after which your reward will be regarded as donation to our organization.

Judging Process

1. Our judging process includes two rounds:

   a. The first round of our judging process will primarily focus on the summary of your research paper. It will be reviewed and graded by our committee of judges, who hold the right to inspect the rest of your paper, to decide if your team is qualified for the next round.

   b. The second round will consist of more detailed analysis by our special judges who will work together to evaluate your submission.

2. We will use the following rubric to judge your submission:

   A team's final score will be the average of the two grades given to both problems

- Summary Sheet (Total: 25%)
  a. Appropriate interpretation of the contest problem (5%)
  b. Brief introduction to all methods used (10%)
  c. Clear statement of conclusions (10%)

- Introduction (Total: 5%)
    a. Brief summary of the problem and background information (5%)
- Solutions (Total: 50%; Note: If more than one solution is being proposed for a single problem, the solution with the highest score will be weighed on 75% of this portion when graded. Any additional solutions will assume the remaining 25%.)
    a. Appropriate assumptions with reasonable justifications (5%)
    b. Suitable usage of the method (10%)
    c. Clear explanations of used methods (25%)
    d. Appropriate sensitivity analysis (5%)
    e. Reflective strengths and weaknesses (5%)
- Conclusion (Total: 10%)
    a. Constructive restatement of the problem, brief overview of the methods, and summary of the results obtained (10%)
- Overall (Total: 10%)
    a. Format is straightforward and reasonable
    b. Formulas and graphs are clearly labeled
    c. A clearly labeled table of contents is included
    d. References are cited appropriately
    e. Any additional components

3. All teams successfully registered will receive a free detailed numerical score report after the contest ends.
4. In order to receive a letter of feedback, teams must pay a $20 fee at the time of registration.
5. Our judges reserve the right to interpret the grading rubric as they please. Repeatedly contesting official decisions may result in being banned, for life, from AoCMM Competition.

Refund Policy

1. Unless the competition has to be canceled due to unavoidable outside forces, no refund will be granted for the cancellation of registration under any circumstances.
2. Disqualification will not result in a refund.

BY PARTICIPATING IN THIS COMPETITION YOU GRANT *ASSOCIATION OF COMPUTATIONAL AND MATHEMATICAL MODELING* THE RIGHT TO PUBLISH OR USE YOUR SUBMISSION FOR ANY PURPOSE. FAILURE TO COMPLY WITH ANY OF THESE RULES WILL RESULT IN DISQUALIFICATION FROM THIS YEAR'S COMPETITION. IF ANY DISCREPANCIES EXIST BETWEEN RULES IN DIFFERENT LANGUAGES, REFER TO THE ENGLISH VERSION. AOCMM HAS THE RIGHT TO INTERPRET ALL RULES ABOVE.

AoCMM 规则

AoCMM 将在北京时间2016年10月4日，星期二，下午3点开始，于北京时间2016年10月19日，星期三，下午2点59分59秒结束。
备注：以下所有时间均使用北京时间。

比赛报名

1. 一个队伍由一到四名**二十**周岁以下的队员组成。所有队员可以来自不同的国家，地区或学校。
2. 2016年比赛注册截止于北京时间2016年10月3日，星期一，下午2点59分59秒。任何在截止日期之后的报名将不会获得参赛资格，此队伍也将不能参加今年的比赛(因此建议所有参赛队伍尽早报名)。
3. 如果任何队员的姓名，邮箱及学校没有被提交，其参赛资格将被作废。如果5美金的参赛费付款失败，也将导致报名作废。若不能使用paypal付款，请及时联系我们。
注：所有提供的信息将不会提供给第三方，仅用于统计用途。
4. 报名队伍将于报名与付款之后的四十八小时以内收到注册确认信。注册确认信中将包含此队伍的***编号***(control number)。这个编号必须被清晰地标注于论文的每一页上。否则将导致成绩被作废，队伍被取消参赛资格。

阅读题目

1.比赛题目将在比赛开始的时间(将在北京时间2016年10月4日，星期二，下午3点)发布在中国官网上(*http://aocmm.sinaapp.com/*)。
2. 参赛者需要对全部***两个***问题提出解答。
3. 所有报名成功的队伍的队员也将会收到以下两个官方邮箱发送的比赛题目。
aocmm.competition@gmail.com *aocmm_competition@126.com*

比赛规则

1. 在比赛期间，所有参赛队伍将被禁止与本队以外的人员讨论完成比赛论文。所有队员需要根据自身实力完成论文。如果参赛队伍中任何队员被发现于比赛期间与本队以外的人员讨论或完成论文，或者是获得任何形式的外界帮助，此队伍中所有队员将被取消参赛资格。
2. 所有参赛队伍可以使用网络或书籍上的任何资料，但是必须清晰地表明引用的来源。
注：严禁抄袭，若被抄袭将会导致参赛资格被取消。
3. 在比赛成绩于我们的官方网站上公布之前，禁止所有参赛队伍讨论他们的论文。

论文规格要求

1. 论文必须完全使用英语。语法与英语表达不需要很完美，但是如果评委因此不能理解你的论文，将会影响到评委给出的成绩。
2. 论文必须使用Times New Roman，字体大小为12号。
3. 队伍编号(control number)必须被明确地标注在论文每页的左上角，右上角必须表明页码。例如：

4. 每一个公式必须占一行，并且需要按顺序标号以便读者阅读。
5. 所有示意图附带包含清楚的描述，并便于识别。
6. 所有代码必须能被清晰地辨认，并使用合适的字体。
7. 整篇论文(包括对两道问题的解答)不得大于***<u>三十五</u>***页(附录除外)，超出部分将恕不给予审批！
8. 对于每个问题的解必须包含篇不超过一页的概要。此概要将包含竞赛问题的解读，对模型与解题方法的精简概述，及由模型得出的结论。
9. 推荐的论文结构包含：
    a. 封面(Title Page) (论文标题，队伍编号等)
    b. 概要(Summary)
    c. 目录(Table of Contents)
    d. 引言(Introduction)
    e. 每个问题的模型(Model(s))
        i. 对于模型的引言
        ii. 假设(Assumptions)与解释(Justifications)
        iii. 对于模型的清晰解释
        iv. 适用度分析(Sensitivity Analysis)
        v. 模型优缺点
        vi. 以及任何参赛队伍觉得有必要的部分
    f. 引用目录(Citations)
    g. 附录(Appendix) -- 模型代码请置于此。

    备注: 只有最重要的代码才需要包含在附录中。

论文提交

1. 论文需要由参赛队伍中任何一位队员在比赛结束之前(北京时间2016年10月19日，星期三，下午2点59分59秒)使用比赛报名时提交的邮箱发送电子版的论文同时到以下两个邮箱：

aocmm.competition@gmail.com *aocmm_competition@126.com*

否则将视为弃权。

注：本竞赛无需提交纸质论文。

2. 所有被提交的论文中最后一个版本将被用于审批。提交次数请不要大于五次。
3. 在比赛结束后，AoCMM将会进行审批过程，比赛结果将会在太平洋时间2016年12月25日，周日，之前公布在比赛官网上，并会发送至所有队员的邮箱。
4. 所有参赛队伍将会获得一张电子证书。如果支付了8美金的证书打印与运输费用，每位参赛队员都会收到一张获得官方认证的证书。

排名前百分之一的队伍将赢到至少200美金的Grand Prize，前百分之三将会获得至少50美金的Alpha Prize，前百分之八会获得Beta Prize，来自特约赞助商的精美礼品。剩余前百分之十五的队伍将获得Gamma Prize。

请在太平洋时间2017年1月30号，星期一，之前联系我们来领取这些奖励，逾期将被视为对AoCMM的捐款。

审批过程

1. 我们的审批过程由以下两轮组成：
    a. 第一轮的审批将主要关注你的概要(summary)。我们的评委将会根据概要来决定该队伍能否晋级下一轮的评选，但是我们的评委有权利阅读论文的所有部分。
    b. 第二轮审批将由评委来对于论文进行更加仔细的阅读。
2. 审批的评分标准将包括：
    - 概要(Summary) (总计: 25%)
        a. 对于竞赛题目的合理解读 (5%)
        b. 对于所有模型的介绍 (10%)
        c. 对于结论的清晰总结 (10%)
    - 引言(Introduction) (总计: 5%)
        a. 对于题目的精简重述与题目背景 (5%)
    - 模型(Models) (总计: 50%; 注: 如果对于某一问题提供了多个模型，得分最高的模型将占总分数的百分之七十五，剩余的模型占其他的百分之二十五。)
        a. 有效的假设(Assumption)与有条理的解释(Justification) (5%)
        b. 适当的模型使用 (10%)
        c. 对于模型的清晰解释 (25%)
        d. 准确的适用度分析(sensitivity analysis)(5%)
        e. 模型优缺点的展示(5%)
    - 总结(Conclusion) (总计: 10%)
        a. 对题目进行有效的重述，模型简单介绍，与对于结果的概述 (10%)
    - 其他 (总计: 10%)
        a. 论文格式
        b. 公式与示意图
        c. 目录(Table of Contents)
        d. 合理引用的参考(References)
        e. 其他内容
3. 所有成功报名的参赛队伍赛队伍将会在比赛之后获得免费的论文具体成绩单。
4. 参赛队伍可在注册时提交二十美金以获得一封对于论文的详细反馈书。
5. 评委有权以各自的方法解读评分标准。过多次反驳官方结论可能会导致该组所有队员将被终身禁止参加AoCMM竞赛。

退款政策

1. 除非受不可避免的因素影响下比赛不得进行，在任何情况下取消报名将不会获得退款。
2. 被取消参赛资格将不会获得退款。

在参加本竞赛的同时，您给予了*ASSOCIATION OF COMPUTATIONAL AND MATHEMATICAL MODELING* 发布您提交的论文或者出于任何目使用您论文的权利。若不遵守如上任何条款，参赛队伍将被取消本届比赛的参赛资格。 如中文版与英语版有任何差异，以英文版为准。最终解释权归竞赛主办方所有。