数学中国 MCM/ICM 参赛指南翻译 (2015 版)

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MCM: The Mathematical Contest in Modeling

MCM: 数学建模竞赛

ICM: The Interdisciplinary Contest in Modeling

ICM: 交叉学科建模竞赛

Contest Rules, Registration and Instructions

比赛规则,比赛注册方式和参赛指南

(All rules and instructions apply to both ICM and MCM contests, except where otherwise noted.)

(所有 MCM 的说明和规则除特别说明以外都适用于 ICM)

To participate in a contest, each team may consist of a maximum of three students and must be sponsored by a faculty advisor from its institution.

每个MCM的参赛队需要由最多三名学生构成,并且要有一名所在单位的指导教师负责。

Team Members: A team may consist of up to three students from the same school and is open to all undergraduate and high school students.

参赛队的成员: 一个队可以由多达 3 名来自同一个学校的学生组成,对于所有的大学生和高中生都可以参加。

Team Advisors: Please read these instructions carefully. It is your responsibility to make sure that teams are correctly registered and that all of the following steps required for participation in the contest are completed:

Please print a copy of these contest instructions for reference before, during, and after the contest. Click here for the printer friendly version.

指导老师:请认真阅读这些说明,确保完成了所有相关的步骤。每位指导教师的责任包括确保每个参赛队正确注册并正确完成参加 MCM/ ICM 所要求的相关步骤。请在比赛前做一份《参赛指南》的拷贝,以便在竞赛时和结束后作为参考。

COMAP is pleased to announce a new supplement to the MCM/ICM contest. Click here to read more details.

组委会很高兴宣布一个新的补充赛事(针对 MCM/ICM 比赛的视频录制 比赛)。点击这里阅读详情!

I. BEFORE THE CONTEST BEGINS:

A. Registration

- B. Choose your team members
- 1. 竞赛前
- A. 注册
- B. 选好参赛队成员

II. AFTER THE CONTEST BEGINS:

- A. View the contest problems via the contest web site
- B. Choose a problem
- C. Teams prepare solutions
- D. Print Summary Sheet and Control Sheet
- 2. 竞赛开始之后
- A. 通过竞赛的网址查看题目
- B. 选题
- C. 参赛队准备解决方案
- D. 打印摘要和控制页面

III. BEFORE THE CONTEST ENDS:

- A. Send electronic copy of Solution Paper by email
- 3. 竞赛结束之前
- A. 发送电子版论文。

IV. WHEN THE CONTEST ENDS:

- A. Prepare Solution Packet
- B. Mail Solution Packet
- 4. 竞赛结束的时候,

- A. 准备论文邮包
- B. 邮寄论文

V. AFTER THE CONTEST IS OVER:

- A. Confirm that your team's solution was received
- B. Check contest results
- C. Prizes /Certificates
- 5. 竞赛结束之后
- A. 确认论文收到
- B. 核实竞赛结果
- C. 颁奖/发证书

IMPORTANT NOTES:

重要注释:

- COMAP is the final arbiter of all rules and policies, and may disqualify or refuse to register any team that, in its sole discretion, does not follow these contest regulations and procedures.
- COMAP 拥有对所有规则和制度的最终解释权,有权不受理任何不符合竞赛规则和程序的参赛申请。
- Decisions of the judges, the contest directors, and the editor of The UMAP Journal are final.
- · 评委、比赛组委会和 UMAP 杂志的编辑的决定都是最终决定。

- If a team is caught violating the rules, the faculty advisor will not be permitted to advise another team for one year, and the advisor's institution will be put on probation for one year.
- 如果参赛队伍违反竞赛规则,该指导老师一年之内将不能指导其他队伍,该参赛单位将被留作观察一年。
- If a team from the same institution is caught violating the rules a second time, then that school will not be allowed to compete for a period of at least one year.
- 如果一个队第二次违反了规定,该学校将最少被禁赛一年
- All times given in these instructions are in terms of Eastern Standard Time (EST). (COMAP is located in the U.S. Eastern Time zone.)
- COMAP 位于美国东部时区,本《指南》中所涉及的所有时间均指的 是美国东部时间。

By submitting an entry, team members agree that:

在提交注册之前,参赛队成员须同意一下条款。

- Their submission and all rights to its publication become the property of COMAP, Inc.
- 参赛队提交的论文的出版权归 COMAP 公司所有。
- COMAP may use, edit, excerpt, and publish this submission for promotional use or any other purpose, including placing it online, distributing it electronically, or publishing it in The UMAP Journal or otherwise, without compensation of any kind.
- COMAP 公司可以使用、编辑、摘录、出版参赛队提交的论文,可以用于 促销或者其他用途,包括将其放在网上,以电子形式分发,或者刊登在 UMAP 杂志中或者其他方式。COMAP 公司不提供任何形式的补偿。

- COMAP reserves the right to use in materials relating to this contest, the names of the team members, their advisor(s), and their affiliations, without further notification, permission, or compensation.
- COMAP 公司有权使用和本次比赛有关的材料,参赛队员、指导教师的姓名,和他们的隶属关系,公司不会特别通知,或者取得许可,也不会提供赔偿。
 - o and team members assert that
 - 。 团队成员声明:
- All images, figures, photographs, tables, and drawings in their submission were either created by the team or else, if reproduced from another source, the submission cites a specific reference for each at its location in the submission.
- 在提交的论文中出现的所有的图像、数据、照片、图表、图纸都是团队原创,或者从其他地方引用,并且在论文中的引用处进行了标注。
- All direct quotations in the submission are enclosed in quotation marks or otherwise identified as such, with a specific reference cited for each at its location in the submission.
- 所有的直接引语都放在了引号中进行标注,或者进行了特殊的引用注明。

I. BEFORE THE CONTEST BEGINS: (竞赛前)

A. Registration

All teams must be registered before 2PM EST on

Thursday, February 5, 2015. We recommend that all teams complete the registration process well in advance, since the registration system will not accept any new team registrations after the deadline. COMAP will not accept late registrations for MCM/ICM 2015 under any circumstances. NO EXCEPTIONSWILL BE MADE.

A. 注册

所有的参赛队必须在美国东部时间 2015 年 2 月 5 号(星期四)下午 2 点前完成注册。届时,注册系统将会自动关闭,不再接受新的注册。任何未在规定时间内注册的参赛队都没有参加 2015 年 MCM/ICM 的资格。不存在例外情况。

- 1. Register your team online via the contest web site: Go to http://www.comap.com/undergraduate/contests/mcm.
- 1. 参赛队通过下面的网站在线注册:

http://www.comap.com/undergraduate/contests/mcm

a. If you are registering your first team for this year's contest, click on Register for 2015 Contest on the left-hand side of the screen. Enter all the required information, including your email address and contact information.

IMPORTANT: Be sure to use a valid and current email address so that we can use it to contact you at any point before, during, and after the contest, if necessary.

a. 如果您刚刚开始注册竞赛的第一个参赛队,请点击网页左边的 Register for 2015 Contest。输入所有需要的信息,包括邮箱地址 和联系方式。

特别注意: 必须输入一个可用的、正确的 E-mail 地址! 以便竞赛组委会与各参赛队在赛前、赛中和赛后都能保持联系。

b. If you have already registered a team for this year's contest and want to register a second team, click on Advisor Login, then log in with the same email address and password that you used when you registered your first team. Once you're logged in, click on Register Another Team near the upper right corner of the page, then follow the instructions there. New: There is no longer a restriction on the number of teams an advisor can register.

b. 如果您已经注册过一个参赛队而想为另外一个参赛队注册,请点击 Advisor Login,打开页面后请您使用注册第一支参赛队时使用的 E-mail 地址和密码进行登录。登入之后请点击网页右上角的 Register Another Team 链接,按照我们的指南进行下一步。新消息:不再有一个指导教师指导队数的限制。

2. Registration Fee

A \$100 registration fee per team is required.

For anadditional \$100 fee per team, you can receive a Judges Commentary written specifically about your team's paper.

We accept payment with Mastercard or Visa only via our secure web site. We cannot accept other forms of payment. Our secure site will process your credit card payment, so your credit card number is protected. Our system will not store your credit card number after it processes your payment.

2. 注册费用

每个参赛队报名费是100美元。

如果参赛队额外交 100 美元,可以收到一个专门为你们的论文写的评委评论。我们仅通过 Mastercard 或者 Visa 收取注册费,费用的收取通过我们的安全网络进行。我们不接受其他方式的付款。我们会保护你信用卡的账号安全,系统在付账之后不会存储你的账号信息。如果支付美金有困难,可以选择数学中国的辅助报名服务,可以点击这个链接 http://www.madio.net/thread-224230-1-1.html

3. After we receive approval from your financial institution(this takes only a few seconds), the system will issue a control number for your team. Your team is not officially registered until you have received a team control number. Print the page that displays your team control number: It is your only confirmation that your team has been registered. This page also lists the email address and password that you entered when registering; you will need this information to complete the contest procedures.

You will NOT receive an email confirmation of your registration.

3. 一旦我们收到了您的信用卡机构的确认(这往往只需要数秒钟),我们的系统将为您的参赛队自动生成一个控制编号。参赛队在没有收到控制编号以前都是没有完成参赛注册的。请将给出参赛队控制编号的网页打印出来:这是您已经注册的唯一的证明。该网页同时也包含了你注册时所提供的 E-mail 和密码的提示,您在完成比赛的整个过程中将会用到它们。

您将不会收到 Email 形式的确认注册邮件。

- 4. If you need to change any of the information (name, address, contact information, etc.) that you specified when you registered, you can do so at any point before or during the contest by logging in to the contest web site with the same email address and password that you used when registering (click on the Advisor Login link on the left side of the screen). Once logged in, click on the Edit Advisor or Institution Data link near the upper right corner of the page.
- 4. 如果需要在赛前或是赛中改变任何您在注册时所填写的参赛信息(姓名、地址、联系资料等)时,你可以点击页面左边的 Advisor Login 链接并使用你的 E-mail 和密码登入竞赛网站。登陆以后点击页面右上角的 Edit Advisor or Institution Data 链接进行修改。5. Check the contest web site regularly for any updated instructions or announcements about the contest. Except in extreme circumstances, COMAP will not send any confirmation,

reminders, or announcements by email. All communication regarding the contest will be via the contest web site.

- 5. 经常性地访问竞赛网站查看更新的比赛说明或与竞赛有关的通知。除非在极特殊的情况下,COMAP 是不会通过 E-mail 发出任何确认、提醒或是通知。所有与竞赛相关的消息将通过竞赛的网站发布。
- 6. You will return to the contest web site during the contest to enter and confirm information about your team, and to print out your team's Control Sheet and Summary Sheets, which you will use when preparing your team's solution packet. Details on these steps follow in the instructions below.
- 6. 返回组委会的网站,登陆并确认所有与您的队伍相关的资料,打印出您的队伍的控制和摘要页面,这些将在您们准备参赛队的题目解决方案的邮包时用到。请仔细阅读这些步骤的详细说明。

B. Choose your team members:

- 1. You must choose your team members before the contest begins at 8PM EST on Thursday February 5, 2015. Once the contest begins you may not add or change any team members (you may, however, remove a team member, if he or she decides not to participate).
- 2. Each team may consist of a maximum of three students.
- 3. Each student may participate on only one team.

4. Team members must be enrolled in school at the time of the contest, but they need not be full-time students. Team members must be enrolled at the same school as the advisor and other team members.

选择参赛队成员:

- 1. 您必须在在美国东部时间 2015 年 2 月 5 日(星期四)晚上 8 点大赛开始以前选择好您的参赛队的队员。一旦比赛开始,您将不能增加或是改变任何一个参赛队队员(但是如果参赛队员本人决定不参加比赛,您可以把他/她从队员名单中删除)。
- 2. 每个参赛队最多都只能由3名学生组成。
- 3. 一个学生最多只能参加一个参赛队。
- 4. 在比赛时间段内,参赛队成员必须是在校学生,但可以不是全日制学生。参赛队成员和指导教师必须来自同一所学校。

II. AFTER THE CONTEST BEGINS:

A. View the contest problems via the contest web site:

Teams can view the contest problems via the contest web site when the contest begins at 8PM EST on Thursday February 5, 2015:

1. The contest problems will become available precisely at 8PM EST on Thursday February 5, 2015; team members can view them by visiting

http://www.comap.com/undergraduate/contests/mcm. No password will be needed to view the problems; simply go to the contest web site at or after 8PM EST on Thursday, February 5, 2015 and you will see a link to view the problems.

2. The contest problems will become available precisely at 7:50PM EST on Thursday February 5, 2015 on the following mirror sites:

http://www.comap-math.com/mcm/index.html

http://www.mathismore.net/mcm/index.html

http://www.mathportals.com/mcm/index.html

If you cannot access any of the sites, there may be a problem with your local Internet connection. Contact your local Internet service provider to resolve the issue.

- 2. 竞赛开始之后
- A. 通过网站的得到赛题

美国东部时间 2015 年 2 月 5 日 (星期四)晚上 8 点竞赛开始时,可以通过竞赛网站得到题目。

1. 赛题会于美国东部时间 2015 年 2 月 5 日 (星期四)晚上 8 点公布: 所有的参赛队员可以通过访问

http://www.comap.com/undergraduate/contests/mcm. 得到赛题。无须任何密码,仅通过网页链接就可以得到赛题。

2、美国东部时间 2015 年 2 月 5 日晚 7 点 50 分,比赛题目也会同步发布于一下镜像网站:

http://www.comap-math.com/mcm/index.html

http://www.mathismore.net/mcm/index.html

http://www.mathportals.com/mcm/index.html

如果以上网页都不能访问,说明您的本地 Internet 链接有问题,请与您本地的 Internet 服务提供商联系。

B. Choose a problem:

Each team can choose any one of the four problem choices and should submit a solution to only one problem.

- MCM problems are Problem A or Problem B.
- ICM problems are Problem C or Problem D.

B. 选题

每个参赛队可以从四个题目中任选一个题目作答,只需要邮寄一个问题的解决方案。

MCM 的参赛队可以选择赛题 A 或 B;

ICM 的参赛队可以选择赛题 C 或 D。

C. Teams prepare solutions:

1. Teams may use any inanimate source of data or materials: computers, software, references, web sites, books, etc. ALL

SOURCES USED MUSTBE CREDITED. Failure to credit a source will result in a team being disqualified from the competition.

C. 参赛队准备解决方案:

- 1. 参赛队可以利用任何非生命提供的数据和资料——包括计算机, 软件,参考书目,网站,书籍等,但是所有引用的资料必须注明出处, 如有参赛队未注明引用的内容的出处,将被取消参赛资格。
- 2. Team members may not seek help from or discuss the problem with their advisor or anyone else, except other members of the same team. Input in any form from anyone other than student team members is strictly forbidden. This includes email, telephone contact, and personal conversation, communication via web chat or other question—answer systems, or any other form of communication.
- 2. 参赛队成员不允许向指导教师或者除了本团队成员以外的其他人寻求帮助或讨论问题。与除本团队成员以外的人的任何形式的接触都是严格禁止的。这包括通过 E-mail 联系、电话联系、私人交谈、通过网络聊天联络或是其他的任何问答系统,或者其他任何的交流方式。
- 3. Partial solutions are acceptable. There is no passing or failing cut-off score, and numerical scores will not be

assigned. The MCM/ICM contest judges are primarily interested in the team's approach and methods.

- 3. 部分解决方案是可接受的。大赛不存在通过或是不通过的分数分界点,也不会有一个数字形式的分数。MCM / ICM 的评判主要是**依据参赛队的解决方法和步骤**。
- 4. SummarySheet: The summary is an essential part of your MCM/ICM paper. The judges place considerable weight on the summary, and winning papers are often distinguished from other papers based on the quality of the summary.

To write a good summary, imagine that a reader will choose whether to read the body of the paper based on your summary: Your concise presentation in the summary should inspire a reader to learn about the details of your work. Thus, a summary should clearly describe your approach to the problem and, most prominently, your most important conclusions. Summaries that are mere restatements of the contest problem, or are a cut—and—paste boilerplate from the Introduction are generally considered to be weak.

4. 摘要

摘要是 MCM 参赛论文的一个非常重要的部分。在评卷过程中,摘要占据了相当大的比重,以至于有的时候获奖论文之所以能在众多论文中脱颖而出是因为其高质量的摘要。

好的摘要可以使读者通过摘要就能判断自己是否要通读论文的正文部分。如此一来,摘要就必须清楚的描述解决问题的方法,显著的表达论文中最重要的结论。摘要应该能够激发出读者阅读论文详细内容的兴趣。那些简单重复比赛题目和复制粘贴引言中的样板文件的摘要一般将被认为是没有竞争力的。

Besides the summary sheet as described each paper should contain the following sections:

除了摘要页以外每篇论文还需要包括以下的一些部分:

• Restatement and clarification of the problem: State in your own words what you are going to do.

再次重述或者概括问题——用你自己的话重述你将要解决的问题。

•Explain assumptions and rationale/justification: Emphasize the assumptions that bear on the problem. Clearly list all variables used in your model.

对于基本原理以及证明的假设——着重陈述在解决问题中提出的假设,清晰的列出所有在模型中应用到的变量。

• Include your model design and justification for type model used or developed.

对于已经用过的或者应用到的模型的构建与证明。

• Describe model testing and sensitivity analysis, including error analysis, etc.

模型的测试与灵敏度分析,包括误差分析等。

• Discuss the strengths and weaknesses of your model or approach.

关于模型或求解方法的优缺点讨论

- 5. The judges will evaluate the quality of your writing in the Solution Paper:
- Conciseness and organization are extremely important.
- Key statements should present major ideas and results.
- Present a clarification or restatement of the problem, as appropriate.
- Present a clear exposition of all variables, assumptions, and hypotheses.
- Present an analysis of the problem, including the motivation or justification for the model that is used.
 - Include a design of the model.
- Discuss how the model could be tested, including error analysis and stability(conditioning, sensitivity, etc.).
- Discuss any apparent strengths or weaknesses in your model or approach.

- 5. 评委对于论文写作的评判主要考虑以下几个方面:
- 简明扼要、有组织是极为重要的。文章正文必须给出主要的解决方案构想和结果。
- 需适当的简化或重申问题。
- 一个清晰的变量和假设的列表
- 需包括如何通过调整使得模型付诸于实际应用这个问题的分析。
- 需包括模型的设计方案。
- 讨论如何进行模型测试,包括误差分析与稳定性(适用条件,灵敏度等)。
- 讨论模型及求解方法的显著优缺点。
- 6. Papers must be typed in English, single or double sided with a readable font of (11 or 12).
- 6. 论文需按规范的格式用英文书写,单面或者双面,用可读的字体,字号为11或12。
- 7. The solution must consist entirely of written text, and possibly figures, charts, or other written material, on paper only. No non-paper support materials such as computer files or disks will be accepted.
- 7. 整个解决方案必须由正文主体部分、必要的图形、图表或其他类型的材料组成且只能以论文形式递交。不是论文形式的材料如计算机文件或磁盘等将不被接受。

8. The Solution Paper must display the team control number and the page number at the top of every page; for example, use the following page header on each page:

Team #321 Page 6 of 13

8. 解决方案的每一页的顶部都需要有参赛队的控制编号以及页码。我们建议在每页上使用页眉,例如:

Team #321

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- 9. The names of the students, advisor, or institution should NOT appear on any page of the print solution or electronic solution.

 The solution should not contain any identifying information other than the team control number.
- 9. 参赛队的成员名单、指导教师名单以及学校名称均不能出现在解决方案的任何一页上。整个赛题解决方案不能包含有除了参赛队控制编号以外的任何身份识别信息。
- 10. Failure to adhere to any preparation rule is grounds for team disqualification.
- 10. 任何不遵守以上规则的参赛队将被取消参赛资格。
- D. Print Summary Sheet and Control Sheet:
- D. 打印摘要和控制页面

After the contest begins at 8PM EST on Thursday February 5, 2015, and while the teams are preparing their solutions, the advisor should:

在美国东部时间 2015 年 2 月 5 日 (星期四)晚上 8 点大赛开始以后: 当参赛队研究他们的赛题解决方案时,指导老师需完成以下几步:

1. Login to the contest web site (go to

http://www.comap.com/undergraduate/contests/mcm. Click on Advisor Login, then enter your email address and password).

1. 登陆大赛网站(访问

http://www.comap.com/undergraduate/contests/mcm. 然后点击 Advisor Login 输入您的 E-mail 地址与密码)。

- 2. Enter the team member names and confirm that each name is spelled correctly. This determines how the names will appear on the contest certificates. COMAP will not make any changes or reprint certificates for any reason.
- 2. 输入参赛成员的姓名,确认拼写正确。这些参赛成员的姓名与学校名称将与出现在证书上的信息一致。请注意: COMAP 不接受由任何原因导致的证书的更改与重新打印的申请。
- 3. Specify the problem that your team has chosen to solve.
- 3. 特别指明您的参赛队伍所选择的赛题。
- 4. Print one copy of the Control Sheet.
- 4. 打印一张控制页。

- 5. Print one copy of the team Summary Sheet.
- 5. 打印一张参赛队摘要页面。

III. BEFORE THE CONTEST ENDS:

- 3. 竞赛结束之前
- A. Send electronic copy of Solution Paper by email: 通过电子邮件发送您的电子版论文
- 1. Each team is required to submit an electronic copy of its solution paper by email to solutions@comap.com. Any team member or the advisor may submit this email.

要求参赛队(由学生或者指导教师)通过 Email 提交一份解决方案的电子版拷贝,发到 <u>solutions@comap.com</u>。任何队员或者指导老师都可以发送论文。

a. Your email MUST be received at COMAP by the submission deadline of 8PM EST on February 9, 2015.

Email 邮件必须在美国东部时间 2015 年 2 月 9 日下午 8 点前发到 COMAP 指定的邮箱。

b. Failure by a team to submit a solution via email by 8PM EST on February 9, 2015 constitutes a violation of the contest rules and will result in that team's disqualification.

- b. 没能在美国东部时间 2015 年 2 月 9 日晚上 8 点前通过 Email 提交电子版论文的参赛队将被认定违反了比赛规则,结果是被取消比赛资格。
- c. No further modifications, enhancements, additions, or improvements may be made to the team's solution paper after this email submission. Each team's electronic submission will be cross-checked for consistency with their paper submission. Any changes to the paper version will constitute a violation of the contest rules and may result in disqualification.
- c. 在电子版提交后不能再对论文进行修改、完善、追加、改进等工作, 电子版论文将和纸质版论文进行交叉一致性检查,纸质论文的任何改 动都将被认定违反了比赛规则,结果是被取消比赛资格。
- 2. In the subject line of your email write: COMAP and your team's control number. For example:

Subject: COMAP 2222

- 2. 在 Email 邮件的主题一栏要写上: COMAP 和你的参赛队控制号。 主题栏示例: COMAP 2222
- 3. Use your team's control number as the name of your file attachments.
- 3. 使用你的参赛队控制号作为附件文件的文件名。
- 4. COMAP will accept only an Adobe PDF or Microsoft Word file of your solution. DO NOT include your Control Sheet, programs

or software with your email as they will not be used in the judging process. Limit one solution per email. The names of the students, advisor, or institution should NOT appear on any page of the electronic solution. Your team's summary should be included as the first page of your file.*Note: The attachment must be less than 17MB. !! Do not use a cloud service such as Google Docs your email must contain a Adobe PDF or Microsoft Word attachment.

- 4. COMAP 仅接收 Adobe PDF 和 Microsoft Word 格式的文件。Email 中不需要包含你的控制页、程序和相关软件,因为它们在评审过程中不会起作用。每封 Email 邮寄一篇论文。队员的姓名和指导教师的姓名不能出现在电子版论文的任何一页。参赛队论文的摘要应该作为你们提交文档的第一页。注:附件不能超过 17MB。不要使用类似谷歌DOCS 这样的云服务,你的邮件中必须要包含一个 pdf 或者 doc 的附件。
- 5. See the rules for submitting the paper copy via mail below.
- 5. 要求按照下面的规则提交论文纸质拷贝。

IV. WHEN THE CONTEST ENDS:

比赛结束的时侯

A. Prepare Solution Packet: (准备论文邮包)

When the contest ends at 8PM EST on February 9, 2015:

在美国东部时间 2015 年 2 月 9 日晚上 8 点大赛结束时:

- 1. Each team member must sign the Control Sheet to pledge that he or she abided by the contest rules and instructions.
- 1. 所有的参赛选手需在控制页上签名,保证他们严格遵守了比赛的规则和说明。
- 2. Make <u>one</u> copy of your team's Solution paper.
- 2. 制作参赛队的解决方案论文的纸质拷贝一份
- 3. Place the Summary Sheet on top of the Solution Paper. 将摘要页装订在论文的第一页上面。
- 4. Staple the Control Sheet on top the Summary Sheet and Solution Paper.

*So the paper order should be: Control Sheet on top followed by Summary Sheet followed by the Solution Paper.

4. 再将控制页装订在刚刚装订好的摘要页和论文的上面,因此论文的 装订顺序应该是:最上面的是控制页、下来是摘要页、下来是解决方 案论文正文。

B. Mail Solution Packet:

邮寄邮包

Mail your team's complete Solution Packet to:
 MCM/ICM Coordinator
 COMAP, Inc.

175 Middlesex Turnpike., Suite 3B

Bedford, MA 01730

USA

1. 在准备好以上要求的邮包后,将它寄到

MCM/ICM Coordinator

COMAP, Inc.

175 Middlesex Turnpike., Suite 3B

Bedford, MA 01730

USA

2. COMAP must receive your Solution Packet via mail on or before Wednesday February 18, 2015. It is your responsibility to make sure that your team's Solution Packet arrives at COMAP by this deadline. Use registered or express mail, if necessary, to insure that it arrives at COMAP by Wednesday February 18, 2015. 2. COMAP 需在 2015 年 2 月 18 日 (星期三)之前(或当天)收到参赛队邮包。每个参赛队必须确保其邮包在截止日期前寄到 COMAP。为了确保您的邮包能在 2015 年 2 月 18 日 (星期三)之前到达 COMAP 请采用挂号或特快邮寄,如果有邮寄论文的困难,可以选择数学中国的辅助论文邮寄服务,可以点击这个链接

http://www.madio.net/thread-224230-1-1.html

- 3. COMAP will not accept late solutions under any circumstances.
- 3. COMAP 不接受任何理由的迟到的邮包。
- 4. If you require confirmation that your print paper was received by COMAP, send the packet via a carrier that provides package tracking. Due to the number of papers received, COMAP can not answer receipt inquiries or emails.
- 4. 如果您需要 COMAP 给出收到邮包的确认,请委托提供包裹签单的邮递员寄送。由于参赛论文数量众多,COMAP 对于没有特殊要求回复的邮包将不提供来函确认服务。

V. AFTER THE CONTEST IS OVER:

在竞赛结束之后:

- A. Confirm that your team's solution was received: 请确认您参赛队的赛题解决方案已被 COMAP 收到:
- 1. You may login to the contest web site using the Advisor Login link to verify that your team's Electronic Solution was received at COMAP. If you require confirmation that your print paper was received by COMAP, send the packet via a carrier that provides package tracking. Due to the number of papers received, COMAP can not answer receipt inquiries or emails.

1. 在寄出赛题解决方案的几天以后,您可以登陆大赛的网站,点击 Advisor Login 链接来核实 COMAP 是否收到了您的赛题解决方案的电子版。如果您想了解纸质版论文是否收到,请通过带有邮包追踪功能的邮寄渠道邮寄,COMAP 不提供收到回执或者收到确认邮件。

B. Check contest results:

查询比赛结果

- 1. Judging: Judging will be completed in March and the results will be posted on April 29, 2015. The Solution Papers will be recognized as Unsuccessful, Successful Participant, Honorable Mention, Meritorious, Finalist, or Outstanding Winner.
- 1. 评判工作将在 3 月结束,结果将在 2015 年 4 月 29 日公布,所有的参赛论文将被评定为 Unsuccessful(不成功)、Successful Participant(成功参赛奖), Honorable Mention(提名奖即二等奖), Meritorious(一等奖), Finalist(入围奖)或 Outstanding Winner (特等奖)等几个等级。
- 2. We will post the contest results on the web site as soon as they are available, so visit the contest web site regularly to check for updates. It will take several weeks for the judges to evaluate the solutions and for COMAP to process the results. Please do NOT call or email COMAP regarding contest results.

2. 一旦所有的结果被确定,我们会立刻在网页上公布,请定时登陆大赛的网站查询比赛结果。评委会花几个星期来评判所有的赛题解决方案及处理比赛结果,请不要来电或是来函到 COMAP 询问比赛结果。

C. Prize/Certificates:

证书发放

After the results are issued, each successfully participating team advisor and student will receive a certificate of participation. You may login to the contest web site using the Advisor Login link to view and print your team's certificates. All international teams will receive ONLY an electronic (PDF) certificate. US teams should allow several weeks after the results are posted to the contest web site to receive your print certificate. Click here to download MCM/ICM certificates. 结果公布后,所有的成功参赛队的指导老师和学生将会收到参赛的证书。你可以通过 Advisor Login 链接登录网站去查看和打印证书。所有的国际参赛队仅能收到一个电子版(PDF)的证书。美国参赛队在网站公布成绩后请耐心等待几周时间,纸质证书会邮寄给你。点击这个网址可以下载证书。如果需要打印纸质证书,可以选择数学中国的辅助证书打印服务,可以点击这个链接

http://www.madio.net/thread-224230-1-1.html

• The Ben Fusaro Award, Typically, among the final MCM papers from which the Outstanding ones are selected is a paper that is especially creative but contains a flaw that prevents it from attaining the Outstanding designation. In accord with Ben's wishes, the award will recognize such teams.

The Ben Fusaro Award 奖,是从为进入决赛阶段的候选论文中选出来的,这些论文具有创造性,但是有些瑕疵使得它没有被评为特等奖。为了达成 Ben 的愿望,这个奖用来奖励符合上面情况的队伍!

• The Mathematical Contest in Modeling's Frank R. Giordano Award began in 2012. It honors Brig. Gen. (ret) Frank Giordano who directed the MCM for 20 years. This award goes to a paper that demonstrates true excellence in the execution of the modeling process.

数学模型的 Frank R. Giordano 奖开始于 2012 年,它由 MCM 的 20 年领导者 Brig. Gen. (ret) Frank Giordano 授予,这个奖授予在模型实际应用中表现突出的参赛队。

• The Institute for Operations Research and the Management Sciences (INFORMS) is the largest society in the world for professionals in the field of operations research (OR), management science (MS), and analytics. INFORMS has long recognized the importance of involving undergraduate students

and faculty in an unscripted process of mathematical modeling whose problems contain many of the modern elements seen by its membership. The MCM/ICM exemplifies these characteristics. Consequently, INFORMS has been an active supporter of the MCM/ICM since its inception.

INFORMS carefully selects and designates a single Outstanding team from each of the four problems - A, B, C, D - as an INFORMS Outstanding winning team whose modeling and analyses best exemplify the style and content reflected in its membership's professional practice. Each of the INFORMS Outstanding teams receives an engraved plaque for their department's use as a public recognition of the team's achievement. Each student also receives a letter of congratulations from the current INFORMS President, a complimentary one-year INFORMS student membership, a print copy of the award plaque suitable for framing, and an individual cash award. Each associated faculty advisor receives a letter of congratulations and appreciation from the current INFORMS President, along with complimentary one-year access to the full suite of award-winning INFORMS journals. 运筹学研究与管理学会 (INFORMS)是在运筹学、管理学,和分析领域 中世界上最大的研究者社团。其早就认识到了大学生和老师参与数学 建模活动的重要性,这些建模问题包含了很多他们的成员正在关注的

要素。MCM/ICM 的比赛体现了这些特点,自从比赛推出以来,INFORMS 一直是比赛的积极支持者。 INFORMS 从 A, B, C, D 四个题目中每个题目选一个特等奖队作为 INFORMS 优胜队,他们的模型和分析要体现出专业的风格和内容。每一个 INFORMS 优胜队将会收到一个给参赛队所在学校的刻匾,作为一个队成绩的公开的标识,每一个学生也会收到一封来自 INFORMS 总裁的祝贺信,一个一年额外的 INFORMS 学生会员资格,一个带框架的刻匾的打印版和个人的现金奖励。每个相关的指导老师,将收到一封来自 INFORMS 总裁的祝贺信,和为期一年的免费接触全套获奖 INFORMS 期刊的资格

• The Society for Industrial and Applied Mathematics (SIAM) will designate one Outstanding team from each problem as a SIAM winner.

Description of the Award

Student Team Members

Each student member of the winning team will receive a cash award of \$500 and three one—year student memberships in SIAM. Team members' travel expenses will be reimbursed by SIAM up to \$650 for domestic travel or \$800 for international travel. A one—year student membership in SIAM will be given to each member of non—winning teams judged as "Outstanding" by the official contest judges.

Faculty Adviser

A suitable certificate for the home institutions will be given to the faculty advisers of the winning teams

美国工业与应用数学协会(SIAM)将从每个赛题所有的参赛队中选出一个特别优秀的参赛队作为 SIAM 的优胜奖。

奖项描述:

学生成员

每个学生成员将会收到一个 500 美金的现金奖励和 SIAM 的一年学生会员资格。

团队成员的路费报销额度将达到国内队 650 美金,国际队 800 美金。 一年的 SIAM 学生会员将会给予每个特等奖队的成员,包括被比赛正式评为特等奖,但是没有被 SIAM 选中的队。

• The Mathematical Association of America (MAA) will designate one Outstanding team from each problem for the MCM as a MAA winner. Each student member of the winning team will receive a certificate. MAA will partial reimburse teams travel expenses to Math Fest so that they may present their paper.

美国数学协会(MAA) 将从参加 MCM 的每个赛题中选出一个特别优秀的参赛队作为 MAA 的优胜奖。优胜队的每个成员将会获得证书,MAA 将部分报销优胜队去参加数学巨星活动的花费,以至于他们可以发表他们的论文。