This flier is meant to inform and teach you about the many helpful tools found at the IIT SCIENCE FAIR EXTRAVAGANZA website. The following pages will show you the ways that our website can help both you and your students through the challenging task of creating and performing an experiment for a science fair. Below is a table of contents, including page numbers, showing where to find specific information on the various areas for which our website provides assistance. If you are interested in exploring our website and learning more about it for yourself, please visit it at

WWW.SCIENCEFAIR.MATH.IIT.EDU
The Project Ideas section of the website gives you numerous project ideas in different subject areas. All of our projects are categorized as either “Easy Projects,” “Medium Projects,” or “Advanced Projects.” Students can browse through our list of project guides and find one that sparks their interest, or they can take our interests quiz that will narrow the projects to the ones that best meet their interests. There is also an option to narrow the projects by subjects.

Each project guide on the Project Ideas page gives a general, yet informative, overview of the project and the steps to completing the project. The guide pages list the objective of the project, the difficulty, and its basic concept, and it also lists the materials a student might need and the possible procedure for the project. These sections can be altered based on how the student wants to test a specific phenomenon. The project guides also give general layouts of the steps for completing a science experiment, starting with an objective and working all the way through to a conclusion. This section is a good learning tool and building block toward getting your students on the right track to science fair success!
Safety is always an important issue when performing any science experiment. That is why we have included an extensive description of the safety hazards that can be encountered while performing an experiment. This section provides a list of the potential risks attributed to the experiments we have currently listed on our website, along with details on how to properly approach these various risks while performing the experiment.

The safety page also details why it is important for students to consider safety when they are working on their science fair projects. It explains how safety consciousness keeps themselves, people that might help them, and their surroundings from getting hurt. A link to the Chicago Students SCIENCE FAIR safety handbook is provided at the bottom of the page which outlines all of the safety requirements for the science fair in more detail.
The Writing portion of the SCIENCE FAIR may be the area that most students have difficulty with. Whether it is knowing how to format a report or citing sources, many students have trouble understanding how to write a proper scientific paper. In the Writing section of our website we provide detailed, step-by-step instruction on how to write a report and on how to properly cite sources.

The report writing section lists all of the sections that are required for a science fair report, as well as gives a description of what each section requires. It also gives some pointers for the style the paper should have (proofreading, grammar, etc.)

The section on citing sources gives the students a description of how to conduct research, as well as how to cite sources. It also details the four major forms of resources and how to properly cite each type.
The Data Analysis section of our website gives your students an overview of how to analyze their data properly. The categories of this section are all based on using Microsoft Excel or a similar program (such as Open Office) in order to properly organize and analyze data. It is essential that students conducting science fair projects be able to analyze their data properly. This section will introduce them to Microsoft Excel, show them how to create various graphs and charts with their data, how to create a best-fit line both with Excel and by hand, how to use statistical formulas in Excel and how to perform a T-test in Excel. All of these tools will help a student feel more confident when trying to compute their results.
The Presentation section of our website is designed to help students overcome their fear of public speaking. With sections on how to talk with the judges and how to organize an oral presentation, this section will help your students become more confident speakers, as well as help them with the organization of their thoughts and ideas. The section that deals with talking to the judges even has video examples of good and bad presentations, and gives students a chance to determine which one they feel was more successful and confident during their presentation. It also gives grading criteria for the presentation that the judges will use.
The Links section may be one of the most helpful sections of the website. As you can guess it contains links to various other websites outside of IIT, as well as a few inside of IIT. Some of the links include being able to ASK A SCIENTIST at Argonne National Laboratory questions about your project, the CPS official science fair website, various websites that contain more projects for students to consider, as well as many external mathematics links and science report writing links.
No project is complete without a breathtaking, eye-popping display to wow the judges and audience. That is where our Display Tips section comes in. In this section we have tips on how to layout your display so that the judges will be able to follow your process step by step, as well as choosing proper colors, how to keep your display from becoming overloaded, where and how to place the title of your project based on your layout, and a helpful (albeit comedic) hall of fame/shame with some excellent and some very poor examples of displays.
There are a few more features that are coming soon to the SCIENCE FAIR EXTRAVAGANZA website. The first of which is a guide on how to take notes while performing an experiment and how to properly log data in a science notebook. Another feature that will be added this fall is an idea generator that will help students come up with some project ideas on their own based on their most common interests. We will also be linking a website currently in production from the University of Chicago that will contain more information in the area of the science fair.

Thank you for taking the time to consider our website for your students. We hope that this information will make it easier to utilize the information we have provided for your assistance, as well as make it easier for your students to successfully complete their science fair project. If you have any suggestions, whether it concerns existing information on the website or items you would like to see added to the website, please feel free to contact us at the email address below, or write to us at the address below. Thanks again, and good luck with the science fair.