



**CALIFORNIA STATE SCIENCE FAIR  
2003 PROJECT SUMMARY**

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| <b>Name(s)</b><br><b>Craig Harter; Devin Head</b>  | <b>Project Number</b><br><b>S0207</b> |
| <b>Project Title</b><br><b>Can We Recognize Patterns in Steam by Cross Sectioning?</b>   |                                       |
| <p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b><br/>The objective of our project is to determine if we can recognize patterns in steam by cross sectioning.</p> <p><b>Methods/Materials</b><br/>The materials and methods used are, acquiring a laser, attaching 2"x2" mirrors around the circumference of a fan motor with approximately a 5" diameter. Display a propane stove on a platform even with the motor. Heat a pot of water until it steams and reflect the laser off the motor/mirrors back through the steam to create plains.</p> <p><b>Results</b><br/>We found that the steam expanded similar to a mushroom cloud with layers swirling outward. The laser projected plains making the steam visible.</p> <p><b>Conclusions/Discussion</b><br/>In conclusion, the differentiating angles of the mirrors as the motor/mirrors rotated projected plains in the steam by cross sectioning.</p> |                                       |
| <b>Summary Statement</b><br>In our project we took a laser and reflected it off of rotating mirrors to record if we could create plains in steam by cross sectioning.  |                                       |
| <b>Help Received</b><br>We would like to acknowledge our parents for driving us to department stores and helping us to assemble the project.   |                                       |