

**SENIOR LEVEL (GRADES 9 – 12):**

Intel ISEF rules require abstracts of **no more than 250 words** to be displayed with the project. An abstract gives the essence of the project in a brief but complete form to judges and the public viewing the project. Tips on Abstract writing can be found at the Society for Science & the Public website at: <http://www.societyforscience.org/isef/primer/index.asp>

*Sample Abstract Template – Senior Level*

Title: Name: School:
Purpose of project / experiment: <ul style="list-style-type: none"><li>• An introductory statement of the reason for investigating the topic of the project.</li><li>• A statement of the problem or hypothesis being studied.</li></ul>
Summarize procedures, emphasizing the key points or steps: <ul style="list-style-type: none"><li>• A summarization of the key points and an overview of how the investigation was conducted.</li><li>• Omit details about the materials used unless it greatly influenced the procedure or had to be developed to do the investigation.</li><li>• An abstract should only include procedures done by the student. Work done by a mentor (such as surgical procedures) or work done prior to student involvement must not be included.</li></ul>
Detail succinctly observations/data/results: <ul style="list-style-type: none"><li>• This section should provide key results that lead directly to the conclusions you have drawn.</li><li>• It should not give too many details about the results nor include charts or graphs.</li></ul>
State conclusions/applications.

*Sample Written Abstract – Senior Level (From Society for Science & the Public Website)*

**PERIOD ANALYSIS OF CATAclysmic VARIABLE X10  
AND ITS IMPLICATIONS ON THE ORIGIN OF LOW STATES**

“Cataclysmic variables are binary systems, each consisting of a white dwarf (the primary) and a low mass star (the secondary). Usually, matter flows from the secondary onto the primary, producing X-rays upon impact. However, previous observations have indicated that certain cataclysmic variables frequently exhibit low states – a dramatic decrease in mass transfer (and thus X-ray production) for an extended period of time. Low states can last up to several years, and this phenomenon is currently not well understood. This research is primarily focused on creating a model to elucidate the origin of low states using data gathered from X10, a magnetic cataclysmic variable that experienced a low state in year 2005. The model proposed in this study attributes low states to the magnetic interactions between the secondary’s starspots and the primary, and its predictions on which systems should exhibit low states and which ones should not have all been confirmed by past observations.”