

[Your Full Name]
[Your Address]
[Phone Number]
[Email Address]
[LinkedIn/Portfolio URL]

[Date]

[Principal Investigator Name]
[Laboratory/Department Name]
[University/Institution Name]
[Institution Address]

Dear [Dr./Professor Surname],

I am writing to express my strong interest in the [Position Title, e.g., Undergraduate Research Internship] within the [Laboratory Name] for the [Season/Year] term. As a [Year] student pursuing a [Degree Name] in Physics at [University Name], I have followed your recent work regarding [Specific Research Area/Paper Title] and am eager to contribute to your team's objectives.

My academic background has provided me with a solid foundation in [Subject 1, e.g., Quantum Mechanics] and [Subject 2, e.g., Electromagnetism]. During my recent coursework, I developed technical proficiency in [Software/Language, e.g., Python, MATLAB, or LaTeX] and gained hands-on experience with [Lab Equipment/Methodology]. I am particularly interested in how your lab utilizes [Specific Technique] to investigate [Specific Physics Phenomenon].

Previously, I [Describe a specific project, lab, or experience]. This experience allowed me to refine my skills in data analysis, error calculation, and [Specific Skill]. I am a detail-oriented researcher who thrives in collaborative environments and is committed to the rigorous demands of experimental/theoretical physics research.

I have attached my CV and academic transcript for your review. I would welcome the opportunity to discuss how my background and enthusiasm for [Specific Subfield] align with the current goals of your research group. Thank you for your time and consideration.

Sincerely,

[Your Signature]
[Your Printed Name]