

To: Miguel Alcubierre  
From: Aakarsh Kaushal  
Subject Line: Inquiry on Alcubierre Drive by Northeastern University Student

Dear Dr. Alcubierre,

I hope this message finds you well.

My name is Aakarsh Kaushal, and I am a second-year Computer Science student with a profound interest in astrophysics at Northeastern University. I am currently engaged in a research project that seeks to explore the theoretical underpinnings and potential applications of the Alcubierre Drive within the realm of space exploration and physics.

Your groundbreaking work on the concept of space-time metric modification to allow faster-than-light travel has not only captivated the scientific community but also inspired many young enthusiasts like me. The implications of your work extend beyond theory and have the potential to redefine our approach to interstellar travel and the future of space exploration.

I am reaching out to request an opportunity to conduct an interview with you. The insights and knowledge you possess are invaluable, and a discussion with you would greatly enhance the depth and quality of my research. If you are amenable, I would like to arrange a virtual meeting at your earliest convenience. The conversation would delve into the conception of the Alcubierre Drive, the challenges of its potential realization, and its implications for future space travel.

I understand how precious your time is and commit to ensuring our discussion is succinct, well-structured, and specifically designed to maximize our allotted time, approximately 30 minutes in length. I am flexible with scheduling and can adapt to the time slot that best suits you.

I look forward to the possibility of discussing this pioneering concept with you and am hopeful for a positive response.

Thank you for considering my request. I eagerly await your reply.

Warm regards,  
Aakarsh Kaushal  
Northeastern University  
College of Computer Sciences Candidate for BS in Computer Science  
Northeastern University  
Email: kaushal.aak@northeastern.edu

To: Miguel Alcubierre  
From: Aakarsh Kaushal  
Subject Line: Details for Upcoming Interview on the Alcubierre Drive

Dear Dr. Alcubierre,

I am immensely grateful for your willingness to participate in an interview regarding your pioneering work on the Alcubierre Drive. Your affirmative response is greatly appreciated, and I am eager to delve into the details of this fascinating subject with you.

To ensure the interview is as seamless and efficient as possible, I would like to propose conducting our meeting virtually via Zoom. I am available to meet at your convenience in the coming week. My schedule is flexible between the hours of 12 P.M. to 5 P.M. from Monday to Friday. Once you provide a time that suits you best, I will arrange everything accordingly.

The interview is expected to last approximately 30 minutes, during which I hope to cover the following questions:

Questions:

1. Could you take us through the initial thought process that led to the conceptualization of the Alcubierre Drive?
2. What are the main theoretical and technological barriers in turning the Alcubierre Drive from a theoretical model into a practical application?
3. How do you envision the future of space exploration should the Alcubierre Drive become a reality?
4. In your opinion, what are the ethical considerations we must address when discussing faster-than-light travel?
5. Are there any ongoing or planned projects that are directly working towards making the Alcubierre Drive a reality?

I will send the Zoom invite link 24 hours before our agreed meeting time. The technical requirements are minimal: a stable internet connection, a camera, and audio capabilities for our conversation.

Thank you once again for this incredible opportunity. I am looking forward to our conversation and the insights you will share.

Best regards,  
Aakarsh Kaushal  
Candidate for BS in Computer Science  
Northeastern University College of Computer Sciences  
Email: [kaushal.aak@northeastern.edu](mailto:kaushal.aak@northeastern.edu)

To: Dr. Alcubierre  
From: Aakarsh Kaushal  
Subject: Rescheduling Our Interview on the Alcubierre Drive  
Date: 25 February 2024

Dear Dr. Alcubierre,

I hope this email finds you in good health. Due to unforeseen circumstances, I find myself in a position where I need to adjust the timing of our scheduled interview regarding the Alcubierre Drive, initially planned for this week.

Understanding the value of your time and commitments, I propose to reschedule our discussion to a more suitable time next week. I am available Monday to Friday, between 12 P.M. and 5 P.M., and will prioritize your convenience in this adjustment.

Your insights into the Alcubierre Drive are immensely valued, and I look forward to our conversation with great anticipation. I am committed to facilitating a smooth and efficient chat that respects both our schedules.

Thank you for your patience and consideration. I am eager to connect soon.

Warm regards,  
Aakarsh Kaushal  
Candidate for BS in Computer Science  
Northeastern University College of Computer Sciences  
Email: kaushal.aak@northeastern.edu

To: Dr. Alcubierre  
From: Aakarsh Kaushal  
Subject: Gratitude for Your Insightful Interview on the Alcubierre Drive  
Date: 25 February 2024

Dear Dr. Alcubierre,

I hope you are doing well. I wanted to thank you for sharing your time and insights on the Alcubierre Drive with me. Our conversation was not only enlightening but also really inspiring, offering a deeper understanding of the complexities and potential of faster-than-light travel.

Your perspectives have enriched my research and academic journey, for which I am incredibly grateful. I look forward to potentially discussing further advancements and engaging with your work in the future.

Thank you once again for this invaluable opportunity.

Best regards,  
Aakarsh Kaushal  
Candidate for BS in Computer Science  
Northeastern University College of Computer Sciences  
Email: kaushal.aak@northeastern.edu

Aakarsh Kaushal

Prof. Clark

ENGW 3302

March 16, 2024

### Analysis Essay for Instructor

To gain a deeper understanding of the implications of the Alcubierre Drive on the future of space exploration, I decided to interview Dr. Miguel Alcubierre based on both quantitative and qualitative reasoning. From a quantitative perspective, Dr. Alcubierre's groundbreaking 1994 paper introducing the concept of a theoretical model for faster-than-light travel based on a space-time metric modification presents a significant milestone in astrophysics and space exploration research. This work has ignited extensive theoretical and scientific research, leading to various citations and discussions in numerous academic circles, thereby establishing Dr. Alcubierre as an important figure in the field.

Qualitatively, Dr. Alcubierre's unique perspective as the founder of the concept offers invaluable insights that secondary sources cannot replicate. His firsthand experience and ongoing engagement with the scientific community provide a depth of understanding and a vision for the future of this technology that is impossible to match. The selection of Dr. Alcubierre was also supported by his public engagement and willingness to discuss his theories, making him an accessible and cooperative interview subject.

The rhetorical purpose behind each piece of correspondence crafted for this occasion was carefully considered to align with the objectives of gaining valuable information through the means of an interview, setting expectations for the interview, managing unforeseen circumstances, and expressing gratitude.

1. **Persuasive Email:** The initial email aimed to convey my genuine interest and respect for Dr. Alcubierre's work, highlighting the relevance of his expertise to my research. The language was carefully chosen to be both flattering and sincere, demonstrating an understanding of his contributions and expressing eagerness to learn from him. The detailed subject line and structured body aimed to capture attention and facilitate a positive response.
2. **Instructional Email:** Following the positive response, the instructional email provided clear, concise details about the logistical aspects of the interview. By including potential interview questions, the intention was to prepare Dr. Alcubierre for the discussion, ensuring a focused and efficient conversation. This email emphasized respect for his time and contribution, fostering a collaborative atmosphere.
3. **Bad News Email:** The need to adjust the interview schedule was addressed in the revised bad news email with a focus on maintaining a positive and constructive tone. The email emphasized flexibility and mutual respect for time commitments. The message was structured to present the schedule change as a straightforward logistical update, offering alternative options to accommodate Dr. Alcubierre's availability. This approach ensured the communication remained professional and focused on the solution, avoiding any negative connotations associated with the change.
4. **Thank You Email:** The conclusion of the interview necessitated an expression of gratitude that reinforced the value of Dr. Alcubierre's contribution. The thank you email was crafted to make him feel appreciated and respected, highlighting the impact of his insights on my research and academic journey. The choice of words aimed to leave a lasting positive impression, potentially fostering future engagements.