

### **1. Words that come to mind:**

Hard-working, enthusiastic, possessing remarkable intellectual potential as well as the capacity for growth, showing the ability to come up with original and the most rational ideas, fast-thinking, eager to challenge herself and share her knowledge with others, helpful, having an ability to concentrate on a problem, inquisitive, good-humored, warm personality, dedicated, reliable, passionate about science and learning, adaptable, cooperative.

### **1. Intellect, hard work; originality of thought; ability to grasp difficult concepts; how to distinguish from other able students:**

At the moment I am teaching Linear Algebra and Analytic Geometry at the National Kiev University where Anastasiia is currently enrolled. Anastasiia not only displays analytic capabilities, but also shows extreme persistence and dedication to her work. Thanks to her quick thinking and hyper-focus approach, it allows her to catch difficult concepts and readily apply new theoretical methods to practice. She answers any question posed by the lecturer with ease, as well as remaining well oriented in the presented material. In comparison to other talented students, Anastasiia manages to complete a greater volume of work, reaching to non-conventional and effective approaches.

Academically, she is one of the most successful students. For instance, she became the only one among her colleagues to achieve full grade in Mechanics course, all the while displaying original approaches to certain physics questions with thorough understanding of the theoretical aspects. What pertains to the other technical work, her excellent grades and exam results reflect not only her high intellectual ability, but her outstanding motivation.

Aside from the mandatory university programs, we give students the opportunity to display the ability to find original approaches to mathematical and physics questions at the advanced level. Anastasiia approaches additional work with great enthusiasm and demonstrates her ability in finding unorthodox and efficient solutions. She allocates a great deal of time for self-education, in order to reach a more fundamental understanding of certain topics.

Moreover, her well-developed spatial comprehension serves as an instrument for visualizing non-trivial mathematical models and helps her succeed in comparison to other students.

Personally, as well as my colleague instructors, I would consider Anastasiia as one of the top few.

### **1. The unusual circumstances (personal or academic) you feel we should know:**

Besides her talent to academia and a winning record at the Olympiads, Anastasiia stands out with her good heart and generosity, which is well respected among both teachers and her colleagues. Having provided much time with the candidates of the International Physics Olympiad, I have gotten the opportunity to familiarize myself with Anastasiia. I have noticed that she has not only given much focus to her result, but as well as her teamwork, using her

talent of reframing difficult concepts into simpler ones. I would go as far as to consider herself as a true teamworking player.

In the summer, I was the team leader of the team of Ukraine at IPhO, where Anastasiia won a bronze medal. I was able to observe Anastasiia's successful interaction with her team as well as the greater sphere of candidates. She has shown herself to be a very sociable and open person, having befriended many international students, finding common interests outside physics as well as academic topics. I believe her passion for physics and mathematics to be a great motivation for many students. In addition, Anastasiia possesses a good sense of humor which makes her even more popular among her peers.

### **Recommendation:**

I am with great enthusiasm writing a recommendation for Anastasiia Kutakh. She stands out from other students with not only her high intellect, but with her constant self-realization and curiosity. Anastasiia manages great volumes of information, as well as possessing academic intuition, allowing her to find the most effective solutions to various problems. From the beginning, Anastasiia has shown herself to be driven by a great passion towards academics. She is never satisfied with only possessing a base understanding, which is why through self-education, she manages to delve deeper into any given topic, going beyond the course framework.

Anastasiia is a multiple winner of National Olympiads: she took winning spots four times at the Ukrainian National Physics Olympiads, which provided her a stable position among the top ten. In the eleventh grade, she became the absolute winner at the top level of the Ukrainian Internet Physics Olympiad, receiving a gold medal at Physics Olympiad "Richelieu Regatta", where there were both Ukrainian and Belarus contenders.

I took notice of her intellectual potential during the time of the National Physics Olympiad 2018, during which she took first place. As a member of the Olympiad jury, I was impressed by her both elegant and unique approach to solving difficult problems.

Her ability to arrive to a more rational conclusion, helped Anastasiia achieve the highest grade among her other contenders, achieving first place.

Being one of the best Ukrainian participants for several years, Anastasiia got into the top 5 students national wide last spring and qualified into the Ukrainian team for the 50 th anniversary International Physics Olympiad that was taking place in Israel. It is during the national selection

that I have gotten the opportunity to personally meet Anastasiia. During one of the thirteen qualifying rounds, students were asked to solve a set number of cosmological tasks with some of them being tasks from the previous IPhO, and Anastasiia resulted in being one of the top two. Judging only by my personal qualifying round, I understood that she would qualify into the main team.

Aside from physics, in grade ten, Anastasiia managed to get second place on the National Olympiad of Astronomy and get into the top ten. In the eleventh grade, she attempted her hand at astrophysics, with quick results: while still being a

school student, she was competing with lower year university students and being able to reach the top twelve at the Ukrainian level. As a result, she was invited to the qualifying rounds for the International Olympiad of Astronomy and Astrophysics. Moreover, she showed best results on the stage of processing data thanks to her excellent calculating abilities.

This was a risk, seeing how the astronomy and astrophysics Olympiad was taking place right before the physics Olympiad. Her participation in two Olympiads back to back was extremely exhausting. Even while not being able to rest, Anastasiia displayed high levels of success at the qualifying rounds of the International Physics Olympiads, at which she received a bronze medal.

Being a university student, she continues to partake in the Olympiads, but this time in the role of a jury member. She is always ready to lend support of any kind, whether it be organizational or task-related for students. Alongside her friends in the faculty, she spends her nights sitting and peer-reviewing work which helps her senior colleague of the jury. With how much I know of Anastasiia, I can say that she possesses a kind disposition that will come to the aid of any person.

I was confidently encouraging Anastasiia to enroll in this university, as I am interested in students which show great potential to become successful future scientists and academics, as well as uphold a great standard of the university. Our faculty can be proud of such students, that not only show academic abilities, but also show the eagerness in playing a significant role in society. I can confidently say that she is doing everything in utilizing her potential as well as having ambitious goals for the future, which is why I am highly recommending Anastasiia.