



### **Dr Gregory Ashton - Ferndown Upper School Leaver - 2008**

I graduated from Ferndown Sixth Form in 2008 with A levels in Physics, Maths, and Music. However, choosing my degree and University was not straightforward. I knew I wanted to go to University to continue learning, but I was torn between music and physics. In the end, the strong advice from Ms Vincent, my A-level Physics teacher, won out, and I started an MPhys at the University of Southampton.

Studying at degree-level was fantastic. I was able to throw myself into my studies. I particularly enjoyed being taught by real researchers at the forefront of their field. During my degree, I took plenty of opportunities to undertake summer research projects, from building photovoltaic solar cells to developing numerical models of magnetic materials. But, in my final year, I discovered a passion for astrophysics. This led me to enrol as a PhD candidate in 2012 to study gravitational waves, tiny ripples in the fabric of spacetime created when black holes collide. When I started my PhD, these gravitational waves had not yet been directly observed, but in September 2015, the LIGO detectors made the first detection, and I was a co-author of the paper! This was a watershed moment for astronomy and won the founders of LIGO the Nobel prize in 2017.

Since completing my PhD in 2016, I have continued to work in gravitational-wave astronomy, making new discoveries about the properties of black holes. This work led me first to Hannover (Germany) and then Melbourne (Australia), working as a “postdoctoral researcher”. I enjoyed living abroad, making new friends, and contributing to cutting-edge research. Then, in 2020 I moved back to the UK and started as a Lecturer at Royal Holloway, University of London. My work now is split between research (I currently lead the LIGO Collaboration’s working group that finds black hole collisions) and teaching.

My time at Ferndown shaped me and provided the foundation I needed for success in my career and personal life. My teachers were passionate but taught me the importance of hard work, while my friends taught me how to enjoy life (balancing work and life is the key to real success). I was often involved in school activities, from building rollercoasters in physics to playing in bands through music. Looking back, I realise I learned many of the skills I now use daily (e.g. writing high-impact scientific papers with 1000’s of authors) by getting involved at school (e.g. helping to organise the leaver’s book).

My advice for students is to be unafraid to be passionate and take all opportunities with both hands. It isn’t possible to predict where you will end up in 10 years. Often, it depends much more on happenstance than anything else. But, if you pursue things that excite you and throw yourself wholeheartedly into those pursuits, you can ensure that you will be proud of your achievements.