Welcome to Senior Honours

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Senior Tutor
Stop press – Proxima b

• Still to confirm that it is rocky … but it does sit in the “Goldilocks” zone where surface water is liquid
• I never would have believed that not only have we found 3,375 exoplanets … but we are now able to characterise these
• The School (now) has two Centres:
  – UKCA: UK Centre for Astrobiology (Prof Charles Cockell) – life in extreme environments
  – Centre for Exoplanet Science (Prof Ken Rice) - characterization of exoplanets, eg. surface and atmospheric biosignatures
  – … both feeding through to MPhys and PhD projects
The Physics Programme
Senior Honours

• Each of you has done well
  – You have mastered the Physics core … and you already have a degree
• … the target now is to make that degree as good as it can be and match your interests
• What does that mean?
  – You now have much greater choice
  – We will present appropriate material, give feedback on your progress and assist explaining difficult concepts
  – You should prepare for lectures and tutorials, and question when you don’t understand (Socratic dialogue!)
• our aim is to help you achieve your academic potential
  – and prepare you for the next stage of your career … in academia or outside
  – We aim to graduate students who are problem solvers with the physics and mathematics knowledge to address real-world challenges
    • 90% in employment/study within 6 months of graduation
The club

- **Staffing:** 70 academic, 75 research, 30 support, 160 PhDs, 30 MSc, 600 UG ~ 1,000 in total

- **Three Institutes:**
  - **ICMCS (Condensed Matter & Complex Systems)**
    - Head: Malcolm McMahon
    - £5.8M RG, 27 academic, 45 research
  - **IfA (Astronomy)**
    - Head: Jim Dunlop
    - £3.3M RG, 16 academic, 19 research
  - **IPNP (Particle & Nuclear Physics)**
    - Head: Luigi del Debbio
    - £4.5M RG, 24 academic, 14 research

- **Turnover:** £28M
Learning

• we are not teaching you (simply) because we are paid to do it – we passionate about Physics and want you to share the excitement that comes from research-led teaching
  – “Talk Physics to me – make my day!”

• you are adults, and we treat you accordingly
  – No roll is taken for lectures or tutorials
  – You don’t have to hand in coursework
    • … and if you don’t then your PT will check if you are alright but otherwise will leave the decision to you

• BUT, understand the consequences
  – Lectures/tutorials/workshops are a well-proven and highly-effective structure
  – Coursework contributes 20/30% of the overall marks
    • No coursework raises the pass mark from 40% to 50/57%
  – It would be a “brave decision” to do anything but attend all, and do all
Feedback … the two-way street

• **We will return your marked scripts within 15 days**
  – except in SH Projects where the moderating takes longer

• **We routinely respond to input from:**
  – Student-Staff Liaison Committee & Class Reps
    • … can be more nimble than Course Monitoring and address more general issues: rooms, catering, computing access …
  – End-of-course surveys, ESES & NSS
    • All feed directly back to annual review of courses and change, if required
  – External examiners
    • Consistently extremely positive about academic standards, organisation and feedback compared to other Russell Group universities
Feedback … cont

• How else can you give feedback?
  – Speak to the lecturer
  – Talk to your PT
  – Drop a note in the Suggestions Box
  – Have a cup of tea with the Director of Teaching or Head of School
  – … and the Class/School reps are always keen on receiving your views
Student successes

- David Grabner (BSc MP) and Keith Clydesdale (MPhys Physics) won the highest marks that we have seen for years.
  - David is studying for an MSc in MP; Keith works for Tesco.
- Stanley Tsang (MSc HPC) won the Industry Project Prize sponsored by SEP for a project with Keysight Technologies on “GPU implementation of the Stable Marriage Problem”
  - Now working for Acceleware in Calgary, Canada
- Ben Guy (PhD) won the Johnson Matthey presentation prize for his research into the flow of pastes … key to problems in the ceramics industry
- Alastair Bruce (PhD) adapted the Stellarium software to use the Oculus Rift headset as an immersive way to explore the sky
Prizes, Prizes …

• 2017 is the Centenary of Charles Barkla’s Nobel Prize
• We will mark this with a series of events
  – Charles Barkla student Bursaries
  – Charles Barkla Commemorative Lecture
  – Display
  – …
  – Charles Barkla Essay Prize: £250 for the best student essay (1,000 words) on Barkla’s Prize-winning research and its implications for our understanding today. Closing date: 31 March 2017

• Max Born established Mathematical Physics at Edinburgh (as well as winning the Nobel Prize).
• His contribution to the University & city has been recognised by a blue plaque. Do you want to attend the unveiling?
  – Selection by ballot – send an email to max.born.plaque@ph.ed.ac.uk