Vision and Strategy 2025-2028: a Proposal

Management Team

Department of Physics and Astronomy

Current version: 20/12/2024

Deadline for comments: Monday 13th January 2025

MT structure

- Head of Department: **Juan Rojo**
- Education portfolio holder: **Marie Louise Blankesteijn**
- Research and Impact portfolio holder: **Oscar Versolato**
- Departmental manager: **Jordi Dahlberg**

Regular participants in MT meetings (every 6 weeks)

- Chase Broedersz (OD N&S BSc)
- John Kennis (OD MNW BSc & BMTP MSc)
- Ivo van Stokkum (OD P&A MSc)
- Jurnan Schilder (OD ME BSc) and/or Mark Rijkeboer (OC ME BSc)
- Gerrit Kuik (Practicum coordinator)
- Rick Bethlem (Graduate School coordinator)
- Johannes de Boer (Technology Center contact)
- Representative of the DEI Committee (2/3 times per year)

In addition, our HR advisor Ilse Ribbink joins the MT meetings every two weeks. We foresee also regular participation of our new Business Controller, Liesbeth Bos.

General Philosophy

- Our department is strong and successful in its **research-focused strategy**: maintaining this profile should be our main priority.
- A strong research profile supported on 2MS & 3MS projects makes us resilient and future-proof. It is also well aligned with the VU general strategy, the long-term strategy of the Beta Faculty, and the financial plans of the VU (*Kadernota 25-29)*.
- Work constructively together with FB & CvB by building and nurturing productive and trust-based relationship.

Research and Funding

- Support research activities as pillar of our department. For this, the following instruments can be deployed:
    - Sufficient PI budgets (provided there is financial room in our budget),

    - Secure access to the Technology Centre resources,
    - Reduced teaching & management load for PIs with large groups.
- Support as much as possible grant applications including those demanding own contributions: ensure sufficient buffer in our budget for this.
- Sustain ongoing effort towards FB/CvB to reduce KDM/overhead costs.
- Reduce impact of research delays due to the move with targeted actions, continuing the policies of the current MT.
- Strengthen ongoing strategic research collaborations (ARCNL, Nikhef, UT) and develop new internal synergies within the department and within the faculty & VU (e.g. around AI, high-tech, ...).
- Strengthen ongoing strategic education collaborations (UT, UvA, AUMC) and develop new internal synergies within the department and within the faculty & VU (e.g. around education for professionals, science MBAs, ...).
- Monitor usage of Technology Centre, ensure that delivered services are commensurate with the costs, and steer whenever required.

Teaching and Education

- The Joint Degree N&S/P&A remains our flagship program. We aim to:
    - increase the VU footprint and visibility by supporting the ongoing joint degree taskforce, increasing and monitoring visibility of VU staff and research in all relevant JD BSc and MSc activities, monitoring and ensuring sufficient contribution to lab tours, research practica, student projects etc,
    - increase the overall student numbers and market share,
    - facilitate the inflow of students to the P&A MSc from related programs (MNW, SBI, STI, ME@VU, Technical Physics BSc programs at the TUs, ...),
    - study the possibility of an Applied Physics & Advanced Technologies route in the MSc program.
- Ensure the MNW and SBI bachelor programs remain healthy and attractive with stable or increasing student numbers, exploit possible new teaching opportunities in these programs.
- Support ongoing efforts to make BMTP and SBI master programs future-proof but also prepare for scenarios where these programs may be discontinued.
- Keep playing a leading role in Mechanical Engineering by:
    - providing eventually a (location) program director;
    - further increasing student numbers;
    - pushing for a joint degree VU/UT;
    - monitoring the financial resources of ME@VU;
    - embedding our teaching/research core expertise in the program,
    - providing internships for sizable student numbers in our labs,
    - creating a ME hub with all relevant stakeholders in VUO; and
    - creatively looking for options to exchange and or share courses/learning lines between the different programs.
- Stimulate further professionalization of physics staff in education (through inclusion in management tasks of the programs, participation in BTQ/STQ/LOL courses, leadership training etc).
- Explore options to develop executive education for professionals.

Structure and Organisation

- Further involve N&S staff in decision-taking, with structured discussions at the staff lunch as main resource (eventually in break-out groups), with clear guidelines about what is expected from all parties.
- Increase frequency of staff lunches to once per month.
- Policy documents to be discussed at the staff lunch will be made available beforehand through Teams to enable colleagues to provide feedback.
- Discontinue the full professor meeting and replace them by **Section-with-MT meetings/lunches** that take place 2 times per year. ARCNL and Nikhef section-with-MT meetings/lunches would take place at Science Park.
- Section-with-MT meetings/lunches would take place on Tuesdays and will be scheduled with sufficient time in advance. The section is responsible for providing the agenda and the topics for the meeting.
- Provide clear guidelines for performance assessment, annual conversations, supervision and mentoring: the goal is not to “police” but to help each other to excel. Monitor effectiveness of annual consultations and steer if required.
- Ensure annual conversations are carried out and properly documented in the system. We strive to a much higher, >80%, fraction of completed annual conversations within the department as compared to the current situation (currently the number is ~10%).
- Open some of the “MT discussions” to interested staff *e.g.* in topics such as strategy for the Technology Center, RDM/RDI, communications/outreach, HR policies. In such cases, the relevant documentation would be made available beforehand via Teams.

Impact and Valorisation

- Further continue our successful outreach and communication strategy, with input from staff which is essential (e.g. blog posts in LinkedIn, reports from some exciting scientific result, content for social media and newsletter).
- Increase visibility of staff in national and international media, proactively look for opportunities in tv, social media, newspapers, popular science journals etc
- Emphasize our strong connections with industry through ASML/ARCNL and many other initiatives (Lumicks, Optics11, Flash Pathology, Rapid Photonics, just to name a few), including also industrial partners for CERN and Einstein Telescope (vacuum, magnets, sensors, superconductors ...) and explore these connections as a further source of research support for our department.
- Broaden our involvement in outreach activities such as in the Weekend of Science, ideally bringing it back to Zuidas in 2025, in collaboration with other departments.
- Support colleagues with start-up and valorisation ambitions, profiting from the expertise and successful track-record available in the department.
- Explore options for post-graduate education and education for professionals by VU staff, such as a Science/Tech MBA program.
- Investigate options for 3MS private funding once overheads are back to a manageable level.