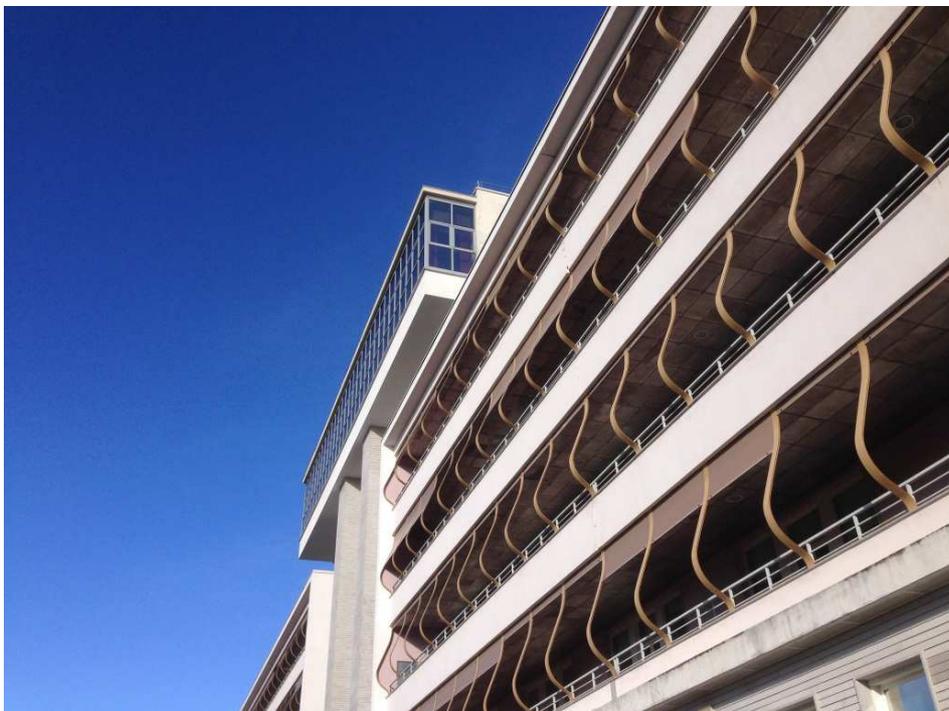




PRESS RELEASE

Global, enterprising, inclusive: at SISSA a pool of experts designing the university of the future



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They come from the best scientific institutes in the world: Oxford University, America's Princeton, Geneva's CERN and Germany's Max Planck. These are the members of ISAC, the International Scientific Advisory Committee, a pool of international revisers gathering world famous scientists will be spending three days at Scuola Internazionale Superiore di Studi Avanzati (SISSA). From 20th to 22nd November they will attend presentations, take part in meetings and debates and explore the institute's research and organisation. What is their goal? Outlining the school's future in accordance with the indicators which will redefine the university's academic and social role over the coming decades. For tomorrow's academia there are three challenges to be won. First and foremost, **a global university**. In the wake



of the winds of autonomism and localism which seem to be blowing through Italian universities too, students and professors will need to move around more and more and internationalism will be an indispensable element favouring top quality research and education - free of barriers and borders. The second determinant factor will be the ability to be **entrepreneurial** and an ability to combine base research with innovation-oriented knowledge. University organisation will have to be capable of reading society and responding to its needs in an original and top quality way. They will, that is, have to be the driving forces behind new ultra-high potential visions and projects capable of dialoguing with other social players, entrepreneurship, politics and the economic world. But that's not all: universities will also have to be **inclusive** and capable of offering study and work opportunities to students and scientists living in difficult circumstances in their home countries. In this sense SISSA has recently approved new guidelines which reserve the school's funds for the organisation of «visits by scientists in whose home countries their physical safety or academic freedom is put at risk by internal or external factors».

Have oneself assessed to take part in change

ISAC's committee, presided over by theoretical physicist Julia Yeomans from the University of Oxford, will supply the tools needed to respond to these challenging demands in the way traced out by SISSA's internationalism and excellence in research and education.

«In the same way as other prestigious world universities SISSA has adopted additional top level comparison tools in the awareness that the challenge is not simply improving our internal performance but also taking part in a fundamental change in academia's meaning and tasks globally», Stefano Ruffo, SISSA's director, has said. «We want to improve by opening ourselves up to assessment by a group of international external scientists - leaders in SISSA's research interest sectors - but we also want to gain an understanding of the ways in which we can take part in higher education's future developments by means of ISAC assessment. And that's not all».

Towards a global university

It is a future, as Julia Yeomans, the ISAC panel's director, has explained, in which barriers will be increasingly absent: «Universities will have to be places of cultural integration, idea melting pots in which encounter and exchange will be promoted at all times. And this because science and research know no borders». Moving in an alternative direction, towards isolation, would be counterproductive to research progress and national development. Universities will be globalised in educational terms too. Stefano Ruffo continues: «Student mobility will steadily increase. It is



already under way but will intensify. For this reason it is important that Italy's educational provision is attractive. If our students go abroad, others will come to study here. In this sense SISSA is a good model as a third of its doctoral students are foreign and come from dozens of different countries. The same will be true of researchers. It is an uphill struggle for Italy given the academic brain drain under way. But reversing this trend is indispensable for the country". In addition, the partnership network with Italian and foreign universities will have to grow trans-nationally. «SISSA currently has more than 200 agreements with the world's top scientific institutions from America's MIT - Massachusetts Institute of Technology to Paris's Ecole Normale, Israel's Weizmann Institute and Japan's Riken. We also have important working relationships with the business world including Fincantieri, Danieli Spa and Tucker-Davis Technologies. A global network guarantees quality and ongoing accordance with internationally required standards in cutting-edge research».

Curiosity, courage and entrepreneurship: this is how innovation is done

In the innovation sector, universities will have to be like human bodies. The various organs are specialised but cohabit in a single organism, Ruffo explains. «In this way base research and education will cohabit with increasing demands for social usefulness and responsibility which will be thrown at academia. One approach does not exclude the other but they will be diverse parts of a whole and nurture each other. Base research is fundamentally important: the greatest inventions emerge precisely when there is no idea what to look for but an ability to be curious, courageous and visionary». Graphene was discovered and the World Wide Web set up in this way. «And if there is a place in which all this can germinate and grow with important social and economic consequences it is the universities». Academia will need to know how to be entrepreneurial. «Which means being active, proactive, concrete, capable of recognising innovative ideas and protecting and nurturing them thus creating a patrimony to be exported and shared with public and private institutions. We must not be frightened of measuring up to other social players. Quite the contrary. This must be encouraged. At SISSA we want to be cross-fertilised and cross-fertilise in turn with excellence because this is the right approach. In Italy the bonds between academia and the economic world are very weak, for example. And this is a trend to be reversed».

Inclusion and human rights

Lastly the responsibility that academia will have to accept from now on in the field of human rights must not be forgotten. Offering an opportunity to those leaving behind some of the earth's suffering places, enabling students and scientists to continue their education and research at our university. This is not simply indispensable solidarity but it is also encompassed by the principles of



education as a fundamental human right and research as a tool for social and individual progress with individuals needing protection and help on occasions. Stefano Ruffo explains: «SISSA has already taken a step in this direction with its new guidelines. Now, together with other institutions in the Trieste system, we have launched a workspace supporting researchers undergoing repression in their home countries or refugees. There are unfortunately many such cases. We are also launching a debate with other schools of excellence in Italy for the purposes of ensuring their potential support. This is one of the issues which will certainly be discussed by the ISAC committee too».

The ISAC assessment committee visiting SISSA will be made up of:

Julia Yeomans, Oxford University, UK (President)

Roberto Car, Princeton University, USA

Patrick Haggard, UCL, UK

Eiichiro Komatsu, Max-Planck-Institut für Astrophysik, Germany

Michelangelo Mangano, CERN, Geneva

Shimon Marom, Technion, Israel Institute of Technology, Israel

David Morrison, University of California, Santa Barbara, USA

Felix Otto, Max-Planck-Institut für Mathematik, Germany

On conclusion of work a report will be drawn up, as in the past, on which SISSA will base its future research and organisation related decisions.

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