Honorary Doctor of Science
Professor Pierre-Louis LIONS

Chairman:

Our next guest is a brilliant mathematician, a master of numbers, curves, symbols and their relations in the abstract that nevertheless have applications and consequences in many aspects of our reality. Born in Grasse, France, Pierre-Louis Lions was educated at the famous Ecole Normale Supérieure, and presented his thesis to the Université Pierre et Marie Curie in 1979. Since then, he has been actively involved with the French Centre National de la Recherche Scientifique and became its Director of Research in 1995. He was appointed a Professor at Université Paris-Dauphine in 1981, and since 1992, he has also held the position of Professor of Applied Mathematics at the Ecole Polytechnique. Professor Lions has made major contributions to mathematics in a variety of areas, from probability theory to the Boltzmann equation and nonlinear partial differential equations, particularly to what is known as "viscosity method". Those nonlinear partial differential equations or PDEs, as Professor Lions points out, "have become a rather vast subject with a long history of deep and fruitful connections with many other areas of mathematics and various sciences like physics, mechanics, chemistry, engineering sciences, etc." Of course, most of us laymen have no idea of what all this means and find high mathematics mysterious and intimidating, but we may well trust Bertrand Russell when he remarks that "Mathematics, rightly viewed, possesses not only truth, but supreme beauty — a beauty cold and austere, like that of sculpture." If truth and beauty in one is what mathematics can offer, the kind of intellectual beauty of which philosophers often speak, who would not join me in paying our deep respect to Professor Lions despite our own ignorance and incomprehension? Russell also maintains that "The true spirit of delight, the exaltation, the sense of being more than man, which is the touchstone of the highest excellence, is to be found in mathematics as surely as in poetry." This is not just the connection between science and literature, but integration of the human spirit in the unity of reason and imagination. Mathematics, especially the kind of high

mathematics that Professor Lions does in his research dealing with abstract theoretical problems, represent indeed the human spirit of the highest order, that is, the human mind at work on a purely intellectual level. After all, thinking, perhaps more than anything else, defines what is uniquely human. *"L'homme n'est qu'un roseau, le plus faible de la nature,"* as Blaise Pascal puts it, *"mais c'est un roseau pensant."*

Professor Lions's outstanding contributions have won him wide international recognition and many prestigious awards. He is a member of the French Academy of Sciences and has been invited to visit or give lectures in universities in the U. S., Poland, Japan, Israel, Switzerland, Germany, and Italy. He has been awarded many coveted prizes, including the Doistau-Blutet Foundation Prize and the Ampère Prize, both awarded by the French Academy of Sciences, and also the IBM Prize and the Philip Morris Prize. Most notably, at the International Congress of Mathematicians in Zurich in 1994, Professor Lions won the Fields Medal, which is the highest award for achievement in mathematics and carries as much weight and prestige as the Nobel Prize in other sciences. He is a Chevalier de la Légion d'Honneur, and has been elected a member of the Naples Academy of Science and the European Academy. But of course we would like to extend his honour and reputation far beyond Europe, and therefore it is a pleasure to have Professor Lions with us here today, in this great city of ours in the East, and to acknowledge his achievements and contributions in the best way we can in our University.

Mr Chairman, now I present to you Pierre-Louis Lions for the degree of Doctor of Science, *honoris causa.*