Remarks made during the release of the special issue of J. Phys A in honor of Ghirardi (April 26, 2007)

The success of quantum mechanics is so intimidating that most people working in the field do not question its completeness. On the other hand, those who don't work closely in the field are quite ready to concede that the equations may be incomplete. The first time I myself heard about the possibility was in a lecture by Professor Clifford Truesdell of the Johns Hopkins University. Three things were true of Truesdell: first, he was an eminent classical mechanician; second, he harped on his pet themes incessantly; third, he loved everything Italian.

In applied mathematics, there are standard techniques for matching of partial solutions each of which is valid in its own domain. I have recently learnt why such techniques cannot be used adequately in bridging quantum and classical mechanics. It is a problem that interests me greatly but I have done nothing myself. It is refreshing to know that Professor Ghirardi has made an important proposal. He and his collaborators have shown a very interesting way of modifying quantum mechanical formulation to account for the collapse of the wave function. No one knows if the model is the final answer, but it is clearly quite imaginative and stretches the mind. This is all you can ask of good science.

I am pleased that the papers that were presented at the 70^{th} anniversary of Professor Ghirardi have been collected in this special volume that is being

released today. I congratulate IOP for bringing out the volume. As the editors point out in the Preface, the volume is more than just the papers presented.

For one thing, the volume includes a nice article by John Stewart Bell which is most likely the last public presentation he made. It was delivered on the occasion of the 25th anniversary of ICTP in 1989. I tremendously enjoyed reading it. I had never read anything written by Bell before and found it to be an original reflection on our view of the world. I know that my office played some role in transcribing John Bell's talk into a publishable format. It is not that Bell disbelieved quantum mechanics. In fact, he says somewhere that it is difficult for him to believe that quantum mechanics, working very well for currently practical set-ups, will somehow fail badly with improvements in counter efficiency, but which he meant measurements in general. He was, however, the most articulate person who drew attention to the problems that lie with quantum mechanics.

In the speech published in this volume, John Bell has stressed the importance of Professor Ghirardi's contributions; he also emphasized the fundamental contributions of Abdus Salam. Bell makes a number of complimentary references to ICTP and recognizes its high scientific level. I am quite pleased about it.

I have great pleasure in welcoming you to this event and hope that you will enjoy the meeting and reading the collection of essays presented in the volume. I wish Professor Ghirardi the best for his future.