

EVALUATION-FORM

#	Evaluation aspects	Score	Comments on the evaluation
1. The project			
1.1	Scientific quality: how important is the activity to advancing knowledge and understanding within its own field and/or across different fields?	excellent	The scientific quality of the project is excellent. The understanding of film growth in terms of elementary mechanism of adsorption of atom, diffusion and nucleation is an important field that can be approached today with ab-initio calculation in the framework of quantum physics. These studies must be complemented, to bridge the time-scale and length-scale gaps, with classical simulation or kinetic MC approach as it is well described in this proposal, by including in an appropriate way the results of the ab-initio calculations.
1.2	Innovative content: to what extent does the proposed activity explore new areas and suggest original concepts?	excellent	The proposal is novel and ambitious and it is focused on the most promising methods to deal with the scientific problems. This is well known to the scientific community, but the proponent and his staff are experts in the field at a high international level, thus it is to be expected that they will succeed in reaching the goals of their project. Certainly they have to solve interesting and challenging problems in order to handle the different steps of the project.
1.3	Realism of the project: how realistic are the project deliveries?	good	The goals can be reasonably reached and the strategies detailed in the program will be realistically successful. The only problem could arise from the limitation of computer performances, even in the years 2002-2005. However the group has access to the best computer facilities in the world and consider also to implement in this program the good local facilities. Both supercomputers and local dedicated modern resources are necessary to the completion of the projects in this field. As indicated in the project the quality and extension of the results can be clearly seen only at the end of the project.
	OVERALL EVALUATION	5 excellent	Based on the previous consideration my overall evaluation is between very good and excellent. In the present grading the score is nearest to excellent.
2. The team			
2.1	Proposer's qualification: how well qualified is the proposer to conduct the project as scientific leader and principal investigator?	excellent	The proposer is an expert in the field and his career and training as well the specific competence are important elements for the success of this program.
2.2	How well qualified are the research groups involved in the project to perform the tasks indicated in the proposal?	excellent	There is only one research unit in Cagliari, but the people involved in the small group are all known as expert at an international level in the particular issues of the research program.

2.3	To what extent the proposed program will enhance the collaboration among the groups and improve the quality of their research activity?	good	It is important the collaboration with the Swiss CSCS as indicated in the project.
	OVERALL EVALUATION	5 excellent	Despite the presence of a single unit of research the scientific level and competence of all the listed participants is well established.
3. Impact and outreach			
3.1	To what extent will the proposed activity contribute to high level scientific training?	good	The activity through the training of a researcher in the field and the involvement of junior students at graduate level will have an impact on scientific education and training.
3.2	What will be the impact of the results in terms of development of the new technologies and/or the advancement in scientific understanding?	excellent	The impact will be certainly important in the advancement of science in the field of surface science and in particular on film growth, with the fall-out in technologies that is one of the motivations of supporting this field of science.
3.3	To what extent the project can contribute to create links and collaborations at international level?	good	The proponent has already excellent links at international level. This project would maintain and improve the existing collaborations.
	OVERALL EVALUATION	4 good	Impact and outreach will be certainly good or very good.
4. Organization and Budget			
4.1	Clarity and importance of milestones: how well conceived and organized is the activity?	5 excellent	The organization of the project is detailed in a way that indicates the competence of the proponent and of the participants that are among the most qualified persons in this field to carry on this project.
4.2	Appropriateness of budget	correct	The budget is correct: OK to personal cost (a researcher), it is important to have dedicated computer resources as indicated, as well access to big computer centers. Other expenses are reasonable.
	OVERALL EVALUATION		The project is presented by a small group but with a high qualification. The organization is detailed and appropriate.

General Comments

In the field of surface physics and growth of thin metal films the project is important novel and promising. The group has the competence and the experience to carry on this important piece of reserch in the best way. The collaboration with the CSCS of Manno (Swiss) is important. I have detailed my comments in the previous notes. To make a general comment, I consider that the stategy of this project is the correct one, expecially in complementing ab-initio calculations with kinetic MC simulations. To obtain this in the right way the experience of the team in both methods is absolutely relevant.

Final score	19	max 20
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