



SMP

1. Noteworthy productions

1.1. Outstanding progress regarding research

The evolution of the SMP (or FSMP) Labex and its overall performance during the last few years exceeds expectations. While the people behind this center have always been major players on the Parisian mathematical scene, the center itself has become a significant player on the international scene. Commenting specifically on research progress is however very difficult for two reasons: 1) in their written and oral reports, this and every other Labex evaluated by this reviewer has emphasized far more the promotion, teaching, working-together, outreach, and position strengthening of mathematics than research progress; 2) the large number of world-class mathematicians associated with this Labex is such that their research output can only dominate the others, at least in perception, and tracing this output to Labex or their other activities is not a trivial matter.

1.2 Striking progress in other “Labex” fields

a. Formation

Notable achievements in this area include:

- the Paris Graduate School of Mathematics
- the FSMP postdoctoral program
- the industrial club (simple but effective idea)

b. Valorization

The best value-added aspect of this Labex is perhaps its role as a catalyst, enabler, facilitator, and effective vehicle to leverage arising opportunities in the mathematical sciences at large.

c. International (outreach, attraction, networking...)

Notable achievements in this area include:

- the Junior Chairs program
- the Senior Chair Program and the first holder, UC Berkeley's Michael Jordan of statistics, Michael Jordan
- the Paris Graduate School of Mathematics
- the reaching out to industrial partners such as EADS, AREVA and TOTAL

2. Added-value resulting from labelling and funding as a “Laboratoire d’Excellence”

FSMP seems to have provided its stakeholders an effective structure for attracting major research funding, a coherent platform for promoting collaboration, and the right magnets for attracting talent.

3. Main weaknesses

3.1. Main weaknesses that might require corrective actions regarding the research performed in the “Labex”

A main weakness that is worth mentioning in this report is common to all Labex projects evaluated by this reviewer: the little thought put into achieving sustainability beyond the expiration of this specific funding from ANR or the French government.

3.2 Main weaknesses that might require corrective actions regarding other fields of the “Labex”

a. Formation

No significant weakness in this area.

b. Valorization

No significant weakness in this area.

c. International (outreach, attraction, networking...)

No significance weakness in this area.

4. “Labex” contribution to structuring the gathered scientific strengths (governance, synergy, common scientific programming, visibility...)

As stated above, FSMP appears to have provided its stakeholders an effective structure for attracting major research funding, a coherent platform for promoting collaboration, and the right magnets for attracting talent. Hence, its performance in this area is quite strong.

5. Beyond scientific results specifically obtained by the “Labex”, give an assessment on its contribution to the development, outreach and overall visibility of the concerned institutions and of the corresponding site.

First, it should be noted, once again, that no scientific results have been specifically highlighted in neither the written nor the oral report by this Labex project. As for its contribution to the development, outreach and overall visibility, the founders and participants in this effort should be commended for their vision and plan as they are truly comprehensive and remarkable.

6. Overall opinion and recommendations

The evolution of the SMP (or FSMP) Labex and its overall performance during the last few years exceeds expectations. While the people behind this center have always been major players on the Parisian mathematical scene, the center itself has become a significant player on the international scene. It is also perhaps one of the top two or three performers among its Labex counterparts in mathematics. It has the interests of students at heart. It focuses on exchanging ideas, building collaborations, and promoting mathematics including in industry. It has a charismatic director and world-class participants. Its website is noteworthy as it is in English, and well tailored for prospective students.

One possible recommendation is to transcend the Paris Graduate School of Mathematics to the French Graduate School of Mathematics or even the International School of Mathematics at Paris.