REPORT TO THE EXECUTIVE COMMITTEE

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My rankings are as follows

(1) Kolountzakis
(2) Agashe
(3) Popescu
(4) Papanikolas
(5) Saidak
(6) Milas

This letter is structured as follows. First, I will make a few remarks about Mihalis Kolountzakis. I will then comment very briefly on the rest of the rankings.

Kolountzakis. I would like to echo Pete Cassaza's sentiments from two years ago. He pointed out during the Michael Lacey deliberations that we can hire a dozen strong people without significantly affecting the status of the department. To move forward, we need to hire high profile individuals respected by the highest echelons of the mathematical community.

Many excellent letters are already in for Mihalis Kolountzakis and some letters are still on the way. Sergei Konyagin, Paul Cohen, Noga Alon and Izabella Laba make it crystal clear that Mihalis Kolountzakis is not just good, but is in fact a first rate mathematician who proved first rate results in analytic number theory, computer science, additive number theory, analysis, and other areas. All of these individuals have excellent credentials in various aspects of number theory. In addition, Dan Mauldin and Alexander Olevski comment glowingly on Mihalis' outstanding work in tiling, an area where number theoretic techniques play a very significant and frequently a leading role.

In addition to his deep knowledge of number theory and analysis, Mihalis Kolountzakis is a respected expert in the use of probabilistic methods. He is cited in a celebrated book by Alon and Spencer, entitled "Probabilistic method" as one of the pioneers of derandomization, a method of obtaining deterministic results from probabilistic methods using conditional probabilities and computer algorithms. Mihalis has successfully applied these

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techniques to solve interesting problems in additive number theory, analytic number theory, and other areas.

Other candidates. After re-examining the files, I have come to the conclusion that as promising as Saidak appears to be, he does not compare at this stage of his career with the other candidates on the short list, except, possibly, Milas. I cannot, in good conscience, rate him above Agashe, Popescu and Papanikolas, even though he is closer to my number theoretic research interests than all the other candidates except Kolountzakis.

Agashe is also somewhat young, but his promise and qualifications are striking enough that I rate him second for this position, above everyone except Mihalis Kolountzakis who I believe is a super-star and an ideal candidates for this position.