Important points of discussion:

1. In relevance to the research paper it is discussed that we can detect  minims and maxims in the data stream. After implementing that part we can send the identified minims and maxims as another event stream and use it to identify various patterns.

2. Regarding the Kalman Filter: As stock price behavior is unpredictable due to external factors, we have to rethink and study about applying Kalman filter. In general applications of Kelman (such as robotics) filter the data behaves in a certain predictable manner, unlike in this domain.

3. Advantages of using CEP: It has the advantage of speed. We can identify the pattern on exact time in appears/completes. Also CEP uses constant memory, no need of storing and processing large amount of data.

About applying Signal Processing techniques :  Suggestion on using Fourier Transformation to filter high frequency data (noise) to smooth-en the pattern.

(Issues : how to identify threshold of noise)

TODO

1.  Apply Kalman filter on the data set, draw pattern/behavior and compare.

2.      Apply Kernel regression on the data set, draw pattern/behavior and compare.

3.      Read on

 i.      Filtering for trading noise (Use Google Scholar etc.)

4.      Identify the physical meaning of each pattern (Create  a doc and update it)

5.      Go through the project MOA (Data stream mining –real time) and Apache commerce math to find relevant libraries

6.      Contact Dr. Ajith Pasqual to discuss about applying signal processing techniques in our problem context