extended to the case where there is learning. It is important to consider the fuzzy versions of these problems. The word "fuzzy" is used in the sense of Lotfi Zadeh.

Finally, a historical note . Problems of this type were considered by many mathematicians: Euler, Hamilton and Steiner, to name a few. But the first systematic study of these problems was carried out at the RAND Corporation during the years after 1948 under the inspiration, and often participation, of von Neumann. Major names were: George Dantzig, Stuart Dreyfus, Lester Ford and Ray Fulkerson. Many other mathematicians worked on these problems. They are closely connected with the theory of games, linear and nonlinear programming, as well as integer programming.

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Doubly stochastic Poisson processes, by Jan Grandell, Lecture Notes in Mathematics, vol. 529, Springer-Verlag, Berlin, Heidelberg, New York, 1976, x + 234 pp., $10.30.

A point process on a space T is a random distribution of points throughout T. Its values are atomic measures on the space with the atoms having weights 1, 2, 3, ... (corresponding to 1, 2, 3, ... points at the atoms). An ordinary stochastic process refers to a random entity whose possible values are functions. In contrast, a point process refers to a random entity whose possible values are counting measures. Inherent and central to the notion of such a process is the idea of whether the points tend to be abundant and closely packed or sparse and widely separated, i.e. their intensity. To formalize this idea, suppose I is a measurable subset of the space. Suppose $N(I)$ denotes the number of points that are in I for a realization of the process. Then the expected or average value of $N(I)$, $E\{N(I)\} = \mu(I)$, is called the intensity measure of the process. In the case that the space is the real line, and the measure μ is absolutely continuous, its derivative is called the intensity function of the process. A point process is called Poisson with intensity measure μ if (i) for measurable I,

$$\text{Prob}\{N(I) = n\} = \mu(I)^n \exp\{-\mu(I)\}/n!, \tag{1}$$