The principle of probability.

We can replace the ball by the beam on the edge. See Fig.1.



Fig.1 – the ideal beam

The beam is an ideal as the edge. The centre of the beam is exactly placed under the ideal sharp of the edge. What will happen? The beam will fall over to the right or to the left? We think the beam will be in the same position as in the beggining. Of course without any inner or outer fluctuations. Imagine the ideal line with precisely lenght. Without any changes from e.g. quantum fluctuations, what is impossible in our real world. Where is the centre of such line? In one point. And what is the lenght of such point? Zero, of course.

What to say. Ancient greeks knew it is impossible to divide an ideal line to two identical parts.

The result of our thinking? The ideal line (or the beam) will fall over to the left or to the right. Always the one lengt will be shorter or longer. That's all. There is no probability. Where does the probability come from then? From the changing of circumstances. From trembling of particles (heat, vacuum). In spite of our ideal case should only one infinitesimal force to change circumstances. Then the beam should go to the left. But suddenly other unexpected infinitesimal force could make the beam go to the right. Yes, infinitesimal forces. What is the infinitesimal? It's not zero, but it's not a real number either. If the infinitesimal is multiplied by infinity then we get a number bigger then 0. and less then 1.



Fig. 2 – the ideal beam with outer particles

In our real world the probability is made by fluctuations – in a real gas by moving molecules (see in the picture above), or in vacuum by creation and annihilation of matter and antimatter (vacuum fluctuations).

A notice – if we have a look at the ideal beam, we must use photons. After that the ideal beam goes down only to the left. The reason are photons. They are coming to the right side. If we use a planty of photons – there will be a normal distribution again.

The probability needs the formation. To create a higher level. Without formation there is no probability. And of course a randomness does not exist without formation.

Imagine a pure line of an one potential or some level of water. There are no differences. See the ocean of a water without any change. The level of such water is pure ideal line (without any differences in the level). If we want the differences we need to separate the surface and to form it. To create changes. After that to create higher changes and so on. But firstly we need to create any changes or differences. For the changes alone are impossible to get themselves on a higher level.