

# FORMATION OF PLANETS & MOONS

137

1989 Sep 13

An infrared check of 100 close stars gives evidence that 1 in 5 is surrounded by a disc of dark matter. It seems possible that both planets and moons are formed by condensation from discs of particulate matter - the rings of Saturn, Jupiter, Neptune etc are as yet <sup>just</sup> not aggregated into moons.

This should be testable by calculating the conservation of ~~angular~~ momentum in such systems. In particular there may be a relationship between the ~~angular~~ <sup>summed</sup> momentum of a planet and that of its moons. As a planetary disc shrinks inward, under gravity, it will rotate faster so that the momentum of the whole is conserved (spinning ballet dancer principle).

Note: calculate these moments for Jupiter, Earth, Venus & moons.

1989-12-23:

Possible to build an interstellar transmitter at eg. Centauri entirely by radio signals, building up from a very simple compound or circuit? Use maximum number of products?

# WEATHER FORECASTING

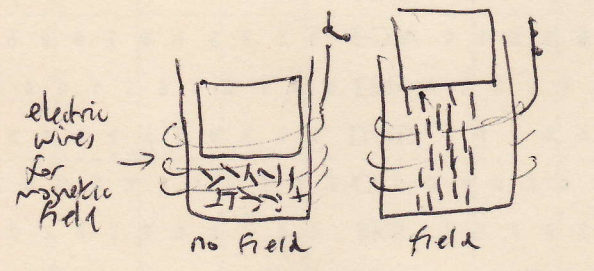
1989 Sep 5

A good approach to better weather forecasting would be to set up a large number of scattered 'weather forecasting' computers, each equipped with a wide range of sensing devices and data storage capacities, and connect these in a 'neural net'. To obtain a low cost, the net would be polled for the collective opinion on a topic. As the connection would be in neural-net mode, the network (or sub-networks within it) would 'learn' forecasting by comparing predictions with actual sensor inputs, and get better and better. The concept of a huge single weather-modelling computer is unlikely to ever prove particularly successful.

# MAGNETIC ROD 'NOODLE SOUP'

1989 July 2

It should be possible to make a sort of switchable, friable packing material out of small magnetized rods which would attain good rigidity along the rod direction by applying a magnetic field to orientate them.



This material might be used, eg. in gear boxes, applying field except when changing gear, when the noodle soup would be demagnetized while a component was shifted in position, then remagnetized at the new position.

