

Dipole Sea Series

# DP Sea Composition and Formation

*Big Bang cooling, cage energy minimisation, and black hole limits*

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## Abstract

Simulates DP Sea formation during Big Bang cooling. Cage energy minimisation for stable configurations. hDP oscillation loci within cages. ZBW collapse limits at black hole densities. Sea composition depends on local conditions.

## 1. Formation During Cooling

As the universe cools, DP pairs condense from the primordial state into stable configurations. Composition varies with temperature and density.

## 2. Cage Energy Minimisation

Stable cages form when SSV energy reaches local minima. hDP oscillation loci map the allowed positions within each cage geometry.

## 3. Black Hole Limits

At extreme densities, ZBW collapse occurs -- the oscillation amplitude shrinks to zero, representing the black hole

interior in CPP.

## **References**

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