

# ZerOrigIndia Foundation Camp Zero 2016

# **Central Research Question / Participant Profile**

Submission deadline August 15, 2016 Contact: info@zerorigindia.org

#### **Background**

#### **Zero or the Importance of Emptiness**

Where there is time, there must be timelessness.

Where there are manifestations, there has to be emptiness.

Where there is one there must be zero.

Indian thinking does seem to have stumbled upon a law of completeness early on. Of opposites that are co-dependent. Of opposites that constitute a whole.

Philosophy indeed speaks of it: void must have been the seed from which all existence sprang. Śūnyatā, or emptiness, must be the cause of 'manyness'; of manifestation.

About Śūnyatā's philosophical background and application we know quite a bit. But when and where was śūnya, zero, as a mathematical concept first applied?

Logician and philosopher Frits Staal has this to say about it:

"[in India] a linguistic term 'lopa' was used to refer to omissions, disappearances and things that are lost.

It is here that the origins of the mathematical concept of zero seem to lie; somewhere between 1000 and 600 BCE.

It is a long period and with smudgy edges but there it is..." (*Studies of the History of Indian Mathematics* (Hindustan Book Agency, 2010)

According to the Epigraphica Indica, the official publication of the Archaeological Survey of India (volume ii, 1894) the earliest inscription using a system of nine digits and a zero comes from Gujarat and is dated 595 CE.

### ZerOrigIndia Foundation



Between these two (and a lot of other references) there is obviously a lot of ground to cover. Especially when the research question is not only to find fresh evidence for zero's earliest appearance but also to locate its connection to philosophy.

Retracing zero's steps in the world; following it back to its source: a philosophical journey to the origins of a mathematical concept.

## **Central Research Question:**

The Zero Project aims to find fresh evidence of zero's earliest appearance in India and seeks to establish zero's possible connection with the philosophical concept of emptiness or Śūnyatā.

In the course of the research due attention shall be paid to the significance of zero as part of the decimal system and its importance regarding subsequent scientific progress in the world.

## What we are looking for:

Up to twenty doctoral students/post docs/researchers in related fields such as Indology, Sanskrit, Indian Philosophy, (Indian) Mathematics, Archaeology, Epigraphy and Logic to partake in 'Camp Zero'.

Camp Zero will be a 10-day long multi-disciplinary brainstorming session of academic pioneers, breaking down the overall research question into clearly defined sub-questions and related research units.

Camp Zero's more defined research proposals will also serve as the basis for an initial joint publication. Furthermore Camp Zero will be part of the selection process, establishing which scholars could go in for the long haul: a four year assignment for a fulltime, paid research position towards finding the origin of zero.



### What we offer:

Participation in Camp Zero for scholars meeting the first requirements (under conditions of availability and adequate participation).

Camp Zero is a 10-day program to be held in India in the fall/winter of 2016.

Camp Zero will be conducted in association with Professor Dr. K. Ramasubramanian (IIT, Mumbai) and other scholars in fields related to the research, including mathematics, Indology etc.

Camp Zero offers the opportunity of meeting scholars from all over the world in an interdisciplinary, interactive set-up. Participating in lectures, brainstorming sessions, library visits, fieldtrips and writing sessions.

Camp Zero will be funded by the ZerOrigIndia Foundation. On campus accommodation and meals will be provided. Airfare has to be borne by the participant by way of commitment but under certain circumstances the organisation may contribute.

## How to apply:

Send a letter with resumé before September 15<sup>th</sup>, 2016, to <a href="mailto:info@zerorigindia.org">info@zerorigindia.org</a>. It is important to demonstrate one's affinity with the subject and the academic contribution one offers. In the letter, please mention two referees (with contact details) for our perusal.

Though we have a slight preference for younger academics at the PhD/Post doc level we do encourage everyone to apply.

Chamber of Commerce: 64508714 RSIN: 855697003 www.zerorigindia.org info@zerorigindia.org Delistraat 43, 2585 VX, The Hague, The Netherlands

ZerOrigIndia Foundation