# Museum of phased-out HPC Systems

## 2011 - 2019 SuperMUC:
SuperMUC was at that time the largest X86 system in the world. It used a new, revolutionary form of warm water cooling developed by IBM. More than 241,000 cores provided a combined peak performance of the two installation phases of more than 6.8 Petaflop/s.

## 2006 - 2011 (HLRB II: SGI Altix 4700)
At that time one of the largest shared memory systems in the world. Its second installation phase with 9728 Itanium Montecito cores was ranked at position 10 of the most powerful computers.

The system was is a so-called ccNuma (cache-coherent non-uniform memory access) System, offering a Single System Image Distributed Shared Memory.

## 2005 - 2011 (Altix 1)
SGI Altix 3700Bx2 was installed early February, 2005 as a replacement for the VPP system (see below). It was the forerunner for the "big" HLRB II.

## 2000 to 2006 (HLRB I Hitachi SR8000-F1/168)
The first system in Europe with more than 1 TFlop/s. At installation time, it was ranked at 5th position in the TOP500 list.

The innovative architecture of the SR8000-F1 enabled the usage of the vector programming paradigm and the scalar SMP-Cluster programming paradigm on the same machine.

HLRB stands for: Höchstleistungsrechner in Bayern.

## 2001 to 2006 (SMP I IBM p690/8)
An eight-way shared memory server based on IBM's Power4 CPU. The system was primarily used for chemistry codes.
<table>
<thead>
<tr>
<th>Year Range</th>
<th>System Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998 to 2005 (LHR II VPP700/52)</td>
<td>The first system at LRZ with more than 100 GFlop/s</td>
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<tr>
<td>1999 to 2002 (First Linux-Cluster, home grown)</td>
<td>Our first step with a Linux-Cluster</td>
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<tr>
<td>1996 to 2001 (IBM SP2/77)</td>
<td>The first fully operational parallel computer at LRZ</td>
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