



**Figure 39.1:** *Restoration of the 1m-reflector building (Photo: Gudrun Wolfschmidt)*

## 39. Restoration Activities of the Observatory Buildings – Past and Future

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### 39.1 Restoration Work on the Initiative of the *Förderverein Hamburger Sternwarte e. V.*

Fortunately, the ensemble of the observatory, including the historic buildings and their furnishings as well as the optical apparatuses and the technical details, have been preserved practically complete and in their original state. The relevance as concerns the architecture and the history of science and technology is correspondingly great. Therefore, on 12 June 1996 the entire observatory ensemble, including the historic buildings and their furnishings as well as the optical apparatuses and the technical details, was inscribed on the Hamburg monument list as item no. 1089.

The preservation of this cultural monument of international rank is threatened nonetheless: The environmental conditions, the change of research projects and enhanced observation possibilities abroad or with satellites are responsible for the fact that the observatory is not used as much as in former times by scientists of the university. Due to the lack of use in several buildings no measures for the upkeep have been carried out for years. Consequently, the fabric of these buildings is severely damaged. The *Förderverein Hamburger Sternwarte e. V.* (founded in January 1998) and its chairperson Prof. Gudrun Wolfschmidt have been advocating the restoration of the buildings for years. In cooperation with the press and through many activities the *Förderverein Hamburger Sternwarte* has drawn the public's attention to the imminent decay and to possibilities of saving the Hamburg Observatory.

When the *Deutsche Stiftung Denkmalschutz* decided in 1998 to raise funds for the upkeep, stabilisation and restoration of the meridian circle building on the occasion of a charity gala, the activities of the *Förderverein* were an important criterion for this decision. By now relevant stabilisation works on the foundations and the porch of the meridian circle building have been carried out with funds from the *Deutsche Stiftung Denkmalschutz*.

Furthermore, the *Förderverein* used its own funds and the support from conservation institutions to restore the

Salvador building in 2003 and the Equatorial building in 2004 and 2005.

In order to be able to cover the expenses of ca. 42,000 euros the *Förderverein*, apart from using its own resources of 19,000 euros, received several private donations, donations from the Bergedorf-Stiftung and a grant from the Stiftung Denkmalschutz Hamburg. Moreover, for 2006 the *Förderverein* managed to raise European funds (ESF-Fond) for small restoration measures (doors and windows).

For its many years of commitment, especially concerning the restoration works but also with regard to various kinds of public events, the *Förderverein Hamburger Sternwarte e. V.* was awarded the *Deutscher Preis für Denkmalschutz* (National award for monument protection) in November 2006 in Weimar. As due to the lack of use of several buildings no measures for the upkeep have been carried out for years, severe damages to the fabric have developed. However, the university restored the most important offices for the astronomers, the main building, including the library and administration rooms, and the so-called civil servant's house.

In spring 2008, as the result of an application of the *Förderverein* made on the basis of an evaluation of the Hamburg monument conservation department, the Hamburg Observatory was declared a cultural monument of national importance.

### 39.2 Restoration of the One-Metre Reflector Telescope Building

Among the impressive large telescopes of the Hamburg Observatory in Bergedorf the one-metre reflector telescope is probably historically the most important. It is largely in its original state and stands for a historic turning point in astronomical research. As the first large reflector telescope by the company Carl Zeiss it is also an important monument of the history of technology. Owing to the already executed restoration measures the means of the *Förderverein* are now almost entirely exhausted so that for other urgently necessary restoration works it can no longer fall back upon its own funds. Sadly, especially the impressive, historically valuable





**Figure 39.2:** *Building of the Meridian Circle (2000) (Photo: Gudrun Wolfschmidt)*

one-metre reflector telescope is in a bad state: this applies also to the related domed structure and the annex with flat roof added in 1925. The idea is therefore to restore the building in two stages first and then to restore the valuable instrument in a third stage. The Förderverein already has a cost estimate from ArchitekturContor which intends to repair the damages to the building in two construction stages.

For the first construction stage costs of 160,000 euros have been estimated. After first funds were promised, construction work on the building could begin on 1 July 2008. The second construction stage, for which costs of 180,000 euros have been estimated, is to begin in 2009. During the restoration the 1960s slab cladding on the annex is to be removed.

For the total costs of c. 340,000 euros funds could be raised from the Federal Ministry of Culture's programme for cultural monuments of national importance, from the Stiftung Denkmalpflege Hamburg, the Reemtsma Foundation and the *Deutsche Stiftung Denkmalschutz*. Fortunately, Hamburg University will also share the costs.

The next step will be the restoration of the one-metre reflector telescope. For this, a detailed study on the instrument's relevance for the history of science

and technology, prepared by Beatrix Alscher (2006) as a diploma thesis<sup>1</sup> and supervised by Prof. Dr. Gudrun Wolfschmidt and Prof. Dr. Ruth Keller-Kampus (Berlin FHTW, Restaurierung / Konservierung von Technischem Kulturgut) will be useful. Funds for carrying out this restoration can probably not be raised before 2010.

### 39.3 Restoration of the Meridian Circle Building

The next big restoration project in the astronomy park is meant to be the meridian circle. Providing museum conditions in order to return the meridian circle from the Deutsches Museum in Munich implies much more than just the restoration of the building. Additional costs for the return transport of the meridian circle<sup>2</sup> and its restoration must also be taken into account. Here we have a very positive development: half a million euros from the Hamburg economic stimulus package are provided by the university for the restoration of the observatory, earmarked especially for the meridian building. Thus, the building can be prepared for the return of the instrument.





**Figure 39.3:** Restoration of the equatorial telescope building (2004–2005) (Photos: Gudrun Wolfschmidt, Photo (middle): Henry Schleppegrell)





**Figure 39.4:** Restoration of the 1m reflector building (2008–2009) (Photo: Gudrun Wolfschmidt)

## 39.4 Perspective

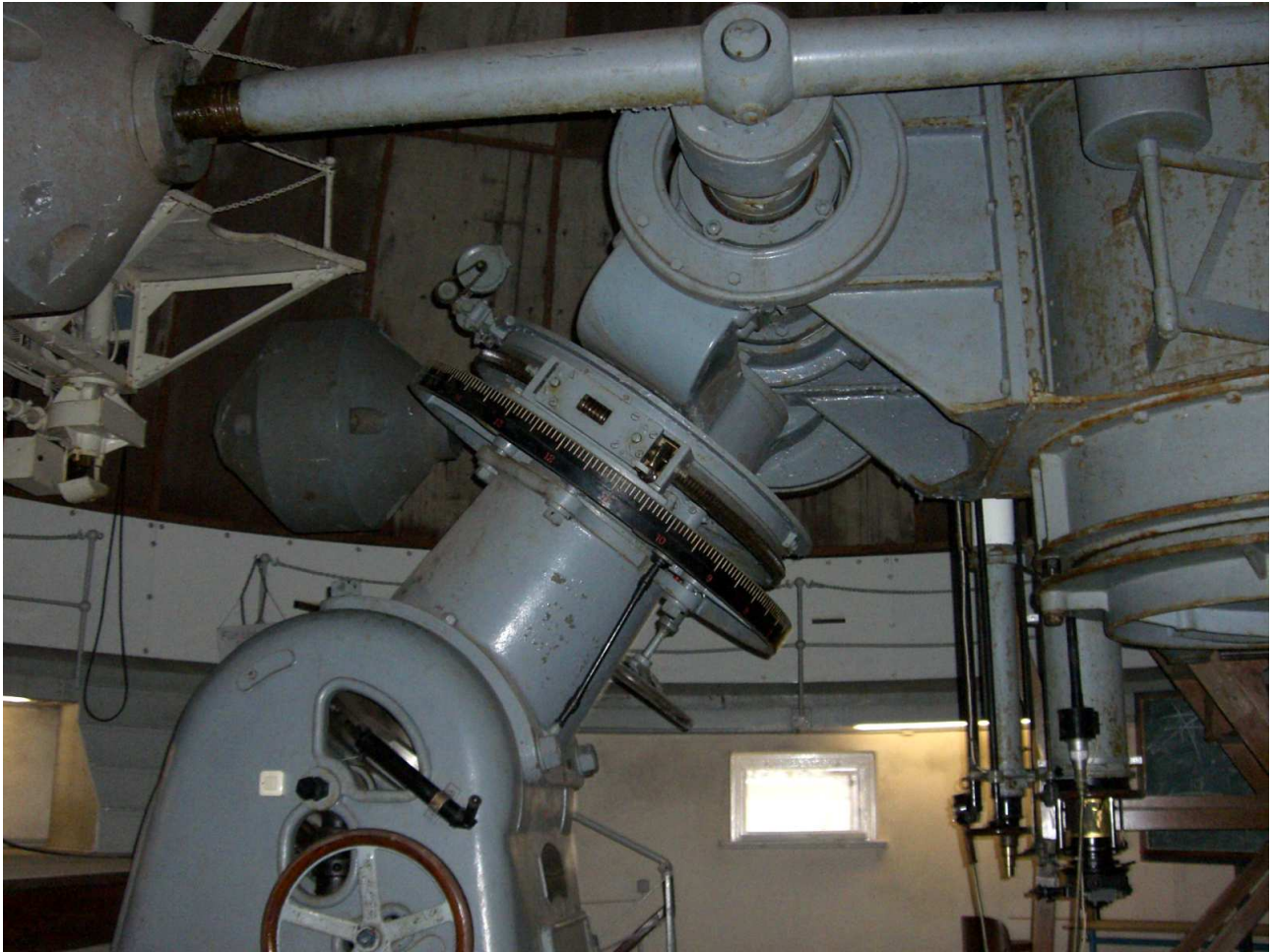
Furthermore, the district of Bergedorf is allocating an investment sum of 500,000 euros for the construction of a multi-functional building (including a lecture hall).

More needs to be done in the future: the Lippert telescope building and the large refractor also show damages, even if their condition is not quite as alarming as that of the buildings described above.

An important date projected for the completion of the crucial restoration measures is the 100th anniversary of the Hamburg Observatory in Bergedorf in 2012. With these comprehensive restoration measures of the most relevant buildings the observatory should be well prepared for an application as UNESCO World Heritage site.

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1. ALSCHER, BEATRIX: *Das 1m-Spiegelteleskop der Hamburger Sternwarte – Konzept der Erhaltung*. diploma thesis 2006, supervisors: Ruth Keller-Kempas and Gudrun Wolfschmidt.
  2. The meridian circle was in Australia and no longer used scientifically. No institution in Hamburg was willing to cover the costs for a return transport. Fortunately, the Deutsches Museum was planning a new permanent exhibition on astronomy with the assistance of Gudrun Wolfschmidt. Thus, as part of a rescue operation the meridian circle could be transported to the museum in Munich, where it is stored today.





**Figure 39.5:** Details of the restoration of the 1 m reflector building – telescope, dome and slit (2008–2009) (Photo: Henry Schlepegrell and Gudrun Wolfschmidt)