

# From Deultum to DigiDeultum

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**Abstract:** *The Roman colony of Deultum is the oldest Roman city in Bulgaria founded in AD 70. Its archaeological research began in the 1980s. From December 2023, a team of specialists from NAIM-BAS, Sofia University St. Kliment Ohridski and Municipal History Museum-Sredets is implementing a three-year project funded by Bulgarian National Science Fund (КП-06-Н80/7 from 8.12.2023). Its main goal is to explore a possible fundamental change in the historical narrative of Deultum by combining the previous scientific approaches with those of digital humanities and archaeological sciences.*

**Keywords:** Roman colony, Deultum, digital humanities

**Ключови думи:** римска колония, Деултум, дигитална хуманитаристика



Professor Dr Lyudmil Vagalinski is an archaeologist whose scientific interest includes cities in Antiquity, the Roman Danube limes and the Great Migration Period. He conducts the archaeological study of the Greco-Macedonian and Roman city of Heraclea Sintica, as well as the Roman colony of Deultum. Vagalinski publishes the scientific journal *Archaeologia Bulgarica* and is a co-founder of the e-media platform of the same name for archaeology.

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Founded probably in AD 70<sup>1</sup> by veterans of *legio VIII Augusta*, *Colonia Flavia Pacis Deultensium* is the oldest Roman city in Bulgaria and one of the two Roman colonies (together with *Colonia Claudia Aprensis*) established in the province of Thrace. *Deultum* is the only one to be studied archaeologically. It lies 15 km southwest of Burgas near the village of Debelt, Sredets municipality (Fig. 1).

Its archaeological research began in the 1980s. At that time, one of the first geophysical studies of an archaeological site in Bulgaria was carried out there (Figs 2-4). In 2004, the coordinate system of the *Deultum* National Archaeological Reserve was linked to the International Terrestrial Reference Frame (ITRF), a first for an archaeological site in the country (Figs 5a-5c). Aerial photographs were applied from the very

<sup>1</sup> Sharankov 2017: 37.



Figure 1. Location of Deultum. (Hammond 1981: fig. 24).



Figure 2. Results of electromagnetic geophysical surveys in Deultum in 1980s. (Photo: Kiril Velkovsky).

beginning (Fig. 6) along with traditional geodetic measurements and, of course, the usual field and office archaeological methodology. Digital models of the colony's terrain were then created, also facilitating

its effective study (Fig. 7). The interdisciplinary approach has always featured strongly in the work of the two successive archaeological teams, in the 1980s and since 2003. Currently, three main architec-



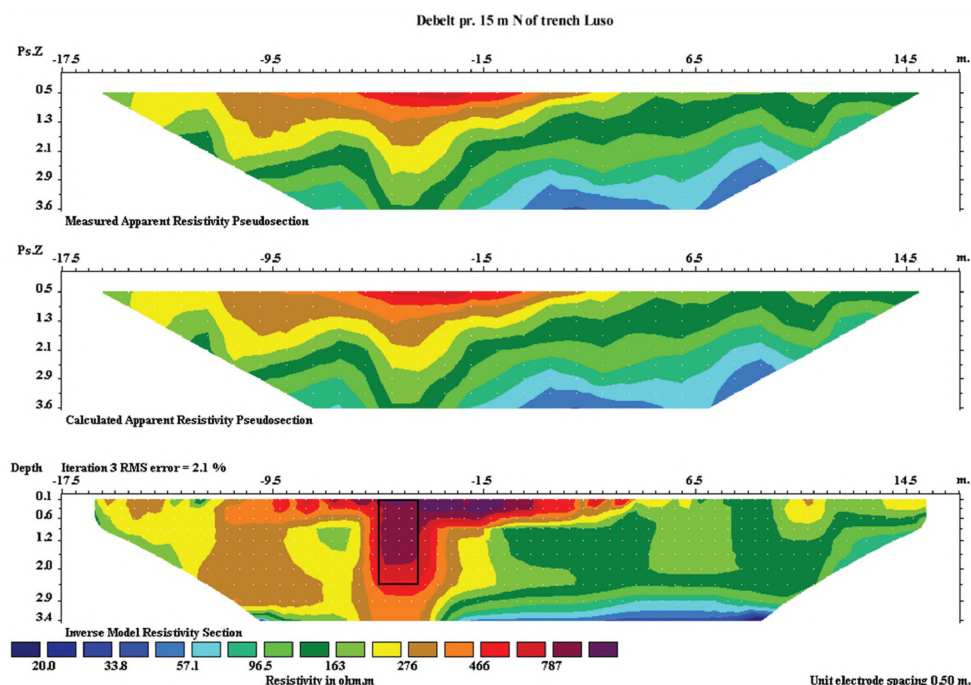


Figure 3. Detecting *Deultum* fortress wall by electromagnetic survey. (Author: Nikola Tonkov).

tural complexes have been excavated: the Roman *thermae*, the so-called “Temple of the Emperor” with adjacent structures and the late antique fortress of the city (Fig. 8-14). The excavations of both tumular and flat necropolises of *Deultum* provide rich information about the history of the colony (Figs 15-17). In 2023 the oldest archaeologi-

cal proof in Bulgaria of Christians (ca. AD 200) was found in a grave of the southern necropolis (Fig. 18)<sup>2</sup>. Intensive GIS field surveys have been carried out during the last years on the administrative territory of *Deultum*<sup>3</sup>.

The scientific results of archaeologists, epigraphists, historians, numismatists, ar-



Figure 4. Geophysical survey in *Deultum* with ground penetrating radar. (Photo: Lyudmil Vagalinski).

<sup>2</sup> <https://www.archaeologia-bulgaria.com/открито-е-най-древното-археологическ/>

<sup>3</sup> These are conducted by Assoc. Prof. Dr Ivo D. Cholakov.



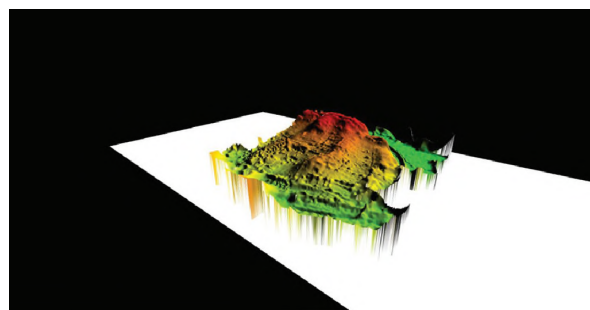
**Figures 5a – 5c.** Control point types in *Deultum*. (Photo: Ian Haynes).

chitects, archaeozoologists, archaeobotanists, physical anthropologists, geologists, chemists, geophysicists and restorers have been published in numerous article<sup>4</sup>. These will be updated in an accessible online volume to be published in 2025.

From December 2023, a team of specialists from NAIM-BAS, St. Kliment Ohridski University and Museum-Sredets are implementing a three-year project funded by the Bulgarian National Science Fund. Its main goal is to explore a possi-



**Figure 6.** Aero photo in 1980s of the medieval fortress near *Deultum*. (Photo: Stefan Damyanov).



**Figure 7.** Digital model of the terrain of *Deultum*. (Author: Atanas Kamenarov).



**Figure 8.** Aerial photo of the current excavations in *Deultum*: Roman *thermae* (in the middle); the so-called “Temple of the Emperor” (right); late antique fortification. (Photos: Lyudmil Vagalinski).

<sup>4</sup> Balabanov, Nenova-Merdjanova 2006; Draganov 2007; Vagalinski 2008; Preshlenov 2015; Sharankov 2017; Vagalinski 2018; Milčeva 2020; Boteva 2020; Raycheva 2022; Russeva 2023; Kostova, Sharankov 2023; Russeva 2023; Vagalinski 2024.



Археологически резерват „Деултум“, с. Дебелт. Обект 02 „Антични терми“  
Archaeological reserve “Deultum”, village of Debelt. Site 02 “Ancient thermae”



Figure 9. Plan of the Roman thermae in *Deultum*. (Authors: Krasimira Kostova, Emil Dakashev).

ble fundamental change in the historical narrative of *Deultum* by combining the previous scientific approaches with those of digital humanities and archaeological sciences (archaeometry, GIS, archaeoinformatics, etc.). Practically, our previous scientific knowledge about the colony will be reinterpreted in a digital environment (Fig. 19). A DigiDeultum concept will be created through the development of digital products. The achieved results

will be shared with the partner projects Measuring Ancient Thrace, *Corpus Nummorum* and the scientific journals *Archaeologia Bulgarica* and *Bulgarian Numismatic Journal*.

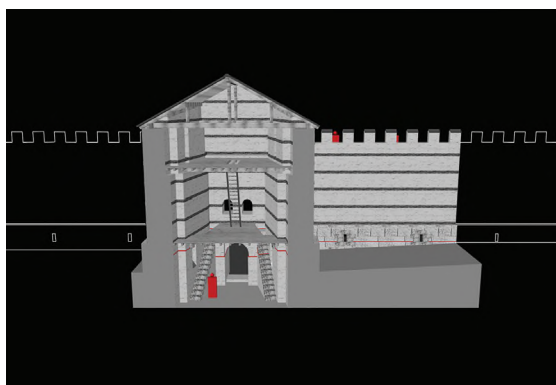
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**Figure 10.** A hypocaust of the Roman thermae in *Deultum*. (Photo: Krasimira Kostova).



**Figure 12.** Legs of life-size Roman bronze human statues found in *Deultum*. (Photo: Hristo Preshlenov).



**Figure 14.** 3D reconstruction of the northern Late Roman tower of *Deultum* (Author: Silva Sabkova).



**Figure 11.** Bronze head of the Roman Emperor Septimius Severus found in *Deultum*. (Photo: Petya Nikolova).



**Figure 13.** The interior of the northern late Roman tower of *Deultum*. (Photo: Lyudmil Vagalinski).



**Figure 15.** A Roman burial in the southern necropolis of *Deultum* (Photo: Ivo D. Cholakov).





**Figure 16.** A magical gem found in a Roman burial in the western necropolis of *Deultum*.  
(Kostova, Sharankov 2023: fig. 15b).



**Figure 17.** Plan of the revealed graves in the southern necropolis of *Deultum*.  
(Author: Ivo D. Cholakov).



**Figure 18.** A silver foil rolled found in the southern necropolis of *Deultum*. The inscription is the oldest archaeological proof in Bulgaria of Christians, ca. AD 200.  
(Author: Silvia Borisova).



**Figure 19.** Digital coin processing in *Deultum*.  
(Photo: Lyudmil Vagalinski).

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## От Деултум към DigiDeultum

## Людмила Вагалински

Основаната най-вероятно през 70 г. сл. Хр. римска колония Деултум е най-старият римски град в днешните български земи. Неговото археологическо проучване започва през 80-те години на XX в. и продължава активно досега. От декември 2023 г. изследователи от НАИМ-БАН, СУ „Св. Климент Охридски“ и Общински исторически музей – Средец започнаха работа по тригодишен проект, финансиран от ФНИ-МОН (№ КП-06-Н80/7 от 08.12.2023 г.). Основната проектна цел е да изследва възможна фундаментална промяна в историческия разказ за Деултум чрез комбиниране на традиционните научни методи с тези на дигиталната хуманитаристика и археометрията.