## Towards a new lithostratigraphic and tectonic model for the "Innsbruck Quartzphyllite Zone" within the Upper Austroalpine nappes (Oberpinzgau, Salzburg, Austria)

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The "Innsbruck Quartzphyllite Zone" (IQZ) extends over 80 km in Austria from Innsbruck (Tirol) in the west to Mittersill (Salzburg) in the east. Tectonically, the IQZ is bound (1) to the north by Eoalpine thrusts, in footwall position below the Höllengebirge-Staufen Nappe (Tirolic-Noric Nappe System, including the "Western Greywacke Zone"), (2) to the west by Eoalpine (Cretaceous) shear zones and faults, in a footwall position below the Ötztal-Bundschuh Nappe System and (3) to the south by a series of Neoalpine thrusts, in a hangingwall position above Penninic, Subpenninic and Lower Austroalpine nappes. These tectonic contacts have been partly overprinted or crosscut by Neogene faults triggered by the exhumation of the Tauern Window and the eastward extrusion of the Eastern Alps (Brenner-Silltal Fault System, Innsbruck-Salzburg-Amstetten Fault System and Salzach-Ennstal-Mariazell-Puchberg Fault System).

Lithologically, the IQZ is dominated by Paleozoic low-grade metamorphic siliciclastic sedimentary rocks intercalated with marble and mafic schist marker horizons as well as Ordovician orthogneisses and Permian metarhyolites. The peak mineral assemblages indicate greenschist facies metamorphic conditions. Additionally, garnet-bearing micaschist, paragneiss and orthogneiss are found as consistent rock assemblages in the hangingwall of the "Patscherkofel Crystalline Complex" (Ötztal-Bundschuh Nappe System), in the Tux Alps and in the vicinity of the Steinkogel, respectively in the western, central and eastern parts of the IQZ.

The internal lithologic and tectonic outline of the IQZ, as well as the correlation of its lower- and higher-grade parts to orogen-scale nappe systems, are still a matter of debate. Furthermore, the limited amount of mapping, structural, petrological and geochronological studies make any attempt for correlating and defining lithostratigraphic and/or tectonic units as well as understanding their deformation and metamorphism uncertain.

In this contribution, we present a new lithological map as well as new structural, petrological and geochronological data for the easternmost part of the IQZ (BMN-map sheet 121 Neukirchen am Großvenediger, Operpinzgau, Salzburg). This data allows us to propose a new lithostratigraphic and tectonic model. We distinguish the lower-grade Salzachgeier Nappe consisting of the Kröndlhorn Complex and the higher-grade Wildkogel Nappe consisting of the Steinkogel Complex. The latter corresponds to the previously defined "Steinkogelschiefer-Komplex", with a wider extent revealed by our new mapping. Stacking of these two nappes as well as the contact to the Höllengebirge-Staufen Nappe was controlled by top-to-the-WNW shearing, most likely during the Eoalpine event. In addition we discuss a new model with a possible correlation of the Salzachgeier and Wildkogel Nappes to orogen-scale nappe systems (Silvretta-Seckau, Koralpe-Wölz nappe systems). Our new model is still in development and has to be tested in the light of further field, geochronologic, petrological and structural studies.